UBS Investment Research

Asia ex Japan Equity Strategy

Debtonomics: Five Years In

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- **The credit cycle is in full swing, as we first wrote about in 2009**

Asia is deep into the credit cycle. Credit/GDP has risen by 15% since '09 We expected real assets to perform well. Both property and equities have performed well (and especially property, banks and consumer stocks) as credit lifted growth.

- **Still some room to go, but rates are likely at a cyclical trough**

The credit cycle could continue but we are at a more advanced stage: macro variables are deteriorating. Crucially, rates have probably troughed.

- **Short-term risk of bubbles as rate remain low; l-t risk of de-rating**

There is (as we wrote in '09) a risk of asset bubbles in this environment. If so, liquidity conditions would appear most favourable in the next six months, and especially in the Philippines and Thailand. Longer term, we think investors need to watch the impact of the credit cycle, especially in Thailand and Indonesia where external conditions are worsening and valuations remain high. We also think that regionally, more credit growth is likely to lead to a de-rating of the market versus the rest of world. The market doesn't pay up for credit-fuelled growth over time.

- **Rates won't remain low forever – be choosier who you dance with**

Among the credit cycle sectors, banks look most interesting right now, given valuations and some positive sensitivity to rising rates. Property valuations are okay, but they face the threat of tighter policy. Consumer stocks look expensive: implied revenue growth rates are 350bp higher than in mid 2009 (more in ASEAN). We think these valuations could come under pressure as the market makes the link between credit and growth, just as it did in China.

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Executive Summary

We first wrote about an imminent credit cycle in the region (ex Korea/Taiwan) in 2009 and how positive it would be for consumption and asset prices (property and equities). We thought within equities it would be especially powerful for Property, Banks and Consumer stocks.

We are now 5 years into the credit theme in Asia ex Japan

Five years into this theme and credit across the region (not just China) has expanded dramatically. With it, we are starting to see deterioration in some macro date – loan to deposit rates have risen, external balances are beginning to worsen. We have clearly transitioned from an early stage of the credit cycle marked by low debt and strong income growth, to a more advanced point.

From an asset market perspective, both property and equities have performed strongly (especially in many of the countries that we identified as particularly vulnerable to this theme in the ASEAN). Within the equity market, the three sectors that we expected to do well on the back of this – property, banks and consumer stocks – have performed well.

Asset prices, banks, property and consumer stocks have all benefitted

From a macro perspective, our colleague Duncan Wooldridge, UBS's Chief Asian Economist, views this as a three-stage process where we move from 1) an early phase of the credit cycle with low rates and leverage and rising incomes to 2) a more mature phase of higher levels of debt, slowing rates of income growth but low rates and then a more dangerous stage 3) where low income growth, high levels of indebtedness and rising global real rates tend to cause problems. Duncan believes we are now in stage two, where the delta on growth from credit is no longer so positive, and the risks of accidents is starting to rise.

Where do we go from here?

On Duncan's measures, we seem some distance away from a more dangerous phase three for now, given that rates remain low and leverage ratios while they have risen are not for the large part at danger levels. But it is worth noting that declining current account surpluses do suggest that income generation is fading against rising leverage. We have clearly transitioned from phase one to a more advanced stage of the credit cycle.

Macro variables are beginning to deteriorate and rates are as low as they are likely to be this cycle

Most significantly, interest rates around the region are unlikely to be any lower than they currently are. Fed policy is as loose at it is likely to get. To some extent this might be offset by capital flowing from Japan, helping the liquidity cycle for now. But inflation within Asia is likely to have bottomed. With it, domestic monetary policy could shift to tightening from loosening/neutral today. While it seems premature to prepare for the end of the credit cycle, the cost of funds during the rest of this cycle is unlikely to be any lower than right now.

Implications for Asian equity investors

From a strategy perspective, we see four key implications for investors as we transition from super-loose policy to less loose conditions over the coming 18 months.

1. In the very short term, as we noted in 2009, there is a risk of asset markets getting frothy in this environment. This has arguably already happened in certain areas (for example, Hong Kong property is up more than 100% from the bottom).

Within equities, strong sustained price momentum is normally a pre-requisite for bubbles - right now, the biggest risk (this is a risk, not a base case) of this happening would appear to be in the Philippines and Thailand. Conditions (recovering growth globally, lowered risk premiums and easy monetary conditions) would seem to offer the greatest potential for this to happen in the next six months, if at all, during this cycle.

Longer-term risk of de-rating versus rest of world as credit fuels growth

2. Longer term, as credit grows faster than GDP, we think this curtails relative performance versus the rest of the world. The evidence of Asia ex Japan in the mid 1990s, or the US and Europe in the 2000s, suggests that the market de-rates credit-fuelled growth over time. By contrast, Asia's best returns in 40 years came off a deleveraged economy with strong external growth drivers – the 2000s. Parts of this region might well have strong long-term growth drivers (demographics and capital deepening opportunities) as it had in the 1970s, 80s and 90s. But right now, growth is being turbocharged by bringing tomorrow's consumption forward to today through credit. The market sees through this over time and de-rates valuations. If valuations don't re-rate, EPS growth is likely to become more critical for relative returns versus other parts of the world.

Within the region if credit keeps growing at current pace, macro and valuations are susceptible to de-rating in Indonesia, Thailand

3. There has been a notable de-rating of China as the equity market has recognised that very high credit growth has fuelled economic growth. China is not alone in using credit to grow. Many of the region's 'darling' markets are in fact seeing their growth being fuelled by credit. Over time, this is likely to become more noticeable as external balances deteriorate and liquidity becomes less stable. China has already shown the path to de-rating that others are likely to tread. The short-term risk of bubbles aside, we would expect valuation compression in other fast credit growth markets, such as Thailand, Singapore and Indonesia longer-term if credit continues to grow at current rates.

HK, Philippine, Thai and Malaysian property markets look to us most vulnerable to a large rate increase. HK stocks seem to be factoring this in - the others less so

4. Investors with a longer-term perspective need to start thinking about what less loose monetary conditions mean for the property, banks and consumer stocks, all of which have done so well from low rates. We think property stocks look challenging when this happens. On our sensitivity analysis, Hong Kong, the Philippines, Malaysia and Thailand all look most vulnerable on an affordability basis to a 200 basis point rate increase from a fundamental perspective. At least valuations reflect this in Hong Kong (less so elsewhere). Cap rates are also likely to rise for landlords. We think Singapore valuations are more vulnerable to this than in Hong Kong.

For banks, there is clear evidence from various cycles and regions that excessive loan growth leads to de-rating. This has already happened to Chinese banks (cyclically, valuations have bounced, but we would expect these to trend lower over time). While most other banking sectors appear to be further behind the Chinese banking sector in terms of asset growth, if growth persists, a de-rating awaits these stocks too. In the meantime, we think moving into a world of rising rates could help interest rate sensitive banks such as in Hong Kong. So far this cycle, revenue growth has been the key driver. We would expect over time that interest rate sensitivity will play a greater role.

Finally, consumer stocks. Since mid 2009 implied revenue growth rates have risen by 350 basis points. We think the market is failing to recognise that credit is playing a key role in growth – it's not all demographics and the rise of the middle class (these drivers are little changed from 10 years ago). As the market makes the link between credit growth and consumption we think very high consumer valuations, especially in the ASEAN are vulnerable to de-rating. This is a longer-term challenge. Furthermore, for longer-duration growth stocks (consumer staples) rising discount rates could also hurt valuations over time.

Risk of de-rating of expensive consumer stocks as investors recognise that credit has been fuelling growth

How it ends

While this credit cycle will come to an end like all others before it, it doesn't need to end as painfully as in 1997. For example, there isn't the same build-up of foreign debt that there was at the time of the Asian financial crisis. More likely, in our view, is that the region will see falling marginal gains from increases in debt and growth will be more sensitive to rising interest costs. As rates gradually rise, growth might slow, and NPLs eventually pick-up.

While this is a more benign end to the credit cycle than the bust of 1997/8 or 2008 in the US and Europe, we need to recognise that credit-enhanced growth can become a drag when the cost of money increases. Conditions over the next six months are likely to be as good as they get for the Asian credit and liquidity story. Party on for now, but be choosier who you dance with.

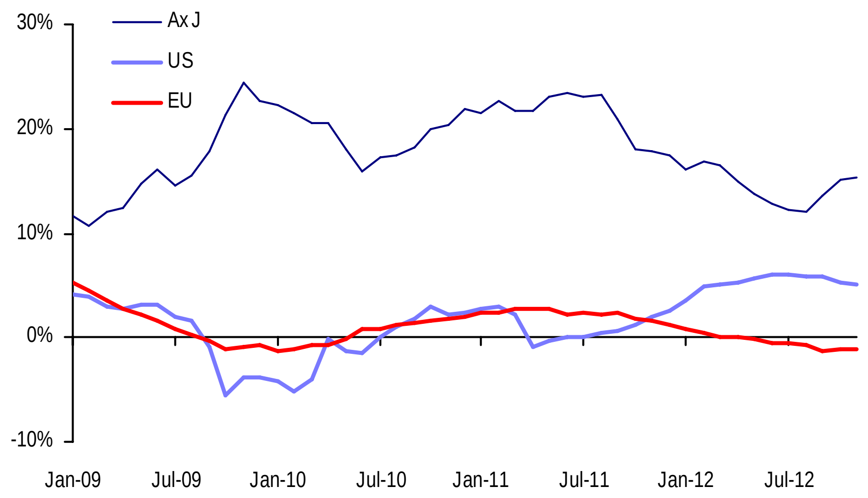
1. Summary of what has happened so far

Back in early 2009 we first started writing about the credit cycle. Our thesis was that we would have a substantial credit cycle in the region (with the exception of Korea and Taiwan), which would lift growth, consumption and asset prices. It would over time lead to a deterioration in balance sheets and make Asia vulnerable to shocks. In Appendix 1 we set out why Asia was ripe for a credit cycle and in Appendix 2 show the evidence of how this has played out.

As a quick summary of those appendices, generally our thesis has actually played out – there has been a very substantial pick up credit growth. Asset prices have performed well. And within equities, the sectors that we thought would do well on the back of this – Property, Banks, Consumer sectors – have performed reasonably well.

1. Firstly, credit growth has been robust across the region – even more so when we consider the anaemic credit growth in the rest of the world.

Chart 1: Bank lending growth y/y



Source: CEIC, UBS estimates

Credit to GDP has risen to 110% in the region, and while not at dangerous levels yet, this is nevertheless a very big increase.

Unlike the mid 2000s, when exports were rising faster than credit, and much more like the early 1990s, credit is now growing faster than both exports and GDP.

This is sucking in imports, and along with rising real exchange rates, lessening trade and current account balances. In line with this, loan to deposit ratios in the banking sector have also worsened. Region wide, the LDR ratio has moved from 69% to 73% and the current account balance from 3.3% to 2.2% (in aggregate for Asia ex Japan since mid 09).

2. The credit cycle has resulted in some inflation pressures though for now inflation is cyclically subdued. However rising inflation particularly relative to the rest of the world has led to appreciating real exchange rates and which in

turn has contributed to some loss of export competitiveness and lower trade surpluses.

3. As expected we have seen asset price inflation. This is most apparent in the property market where property prices have risen, given the loose monetary arrangements in place. While regulators have been trying to contain these price movements in some countries (and this is welcome, lest we repeat either 1997 or 2007), they have nevertheless risen sharply.

4. While property has performed well, equities have taken longer to get going. We saw two beneficiaries – yield stocks (as investors fled low-yield cash for inflation protection in equities, just as in property) and in the domestic sectors benefitting from credit creation – property stocks, banks and consumer stocks (ex Korea, Taiwan). The yield theme has finally got going with more panache in the last year. But it was slow to catch on. Within the equity market, while property stocks have de-rated, banks have performed in line but also de-rated. Consumer stocks on the other hand have re-rated materially.

2. What happens next?

From a macro perspective, the credit bubble is well advanced. But it does not seem to us to be complete yet, nor about to roll over. Generally, we look for three things – a sharp rise in debt, deterioration in incomes *and* a rise in real interest rates as warning signs of an end to the credit cycle.

Of these, as we've shown, the debt data suggests an already meaningful increase – though it could go considerably further. The income deterioration is characterised by falling trade surpluses and some current account deficits. This has happened, though we are not yet in 'danger' territory, region wide. Finally, interest rates remain very low – for now.

It seems premature to be worrying about the end of this credit cycle *too* much today, given that we have only exited stage one of the credit cycle and are gradually moving into stage two (on Duncan's metrics), but we have to recognise that Asia ex Japan has been largely a credit story: debt has risen. External balances are deteriorating. Today, interest costs remain low. But for how long?

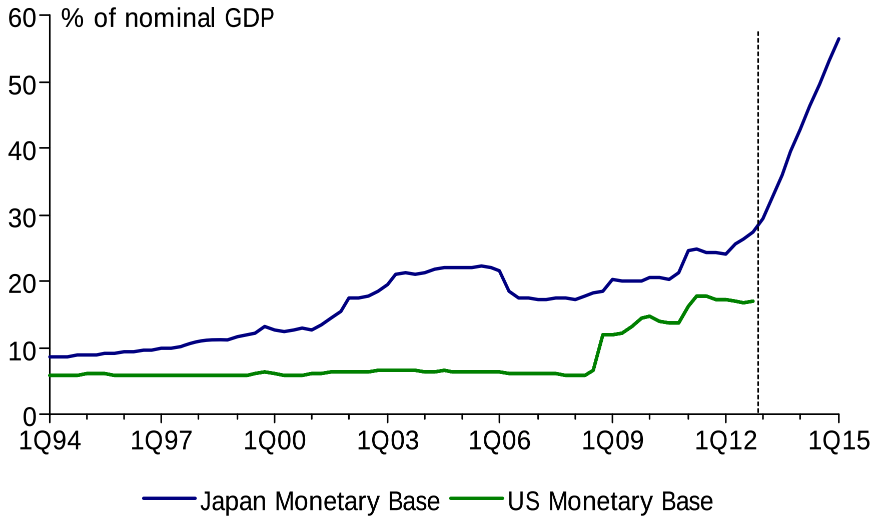
The key short-term threat to the cycle – rates

There are three impulses to consider. 1) US monetary policy is as easy as it is likely to be with the risk going forward that yields start to rise (longer-dated yields first). 2) BoJ balance sheet expansion could provide some additional capital flows to the region out of Japan. 3) We are likely close to if not at the bottom of the Asia ex Japan inflation cycle, so domestic monetary policy will likely tighten gradually from here. The combination of these three dynamics is that the cost of credit is close to if not actually at the lowest levels it is likely to be this cycle, right now.

With the US recovering we doubt that US monetary policy gets any easier than it is right now. This probably has greater implications for long-dated debt rather than short-dated debt for now.

Offsetting this to some degree in the short-term is the BoJ's actions. Chart 2 shows the proposed balance sheet expansion from Japan's central bank. As a share of GDP it is about 25% over the next two years, and is equivalent in current dollar terms to 65% of the size of US QE1 and 2.

Chart 2: Japan monetary base vs US monetary base



Source: CEIC, UBS

Some of this is likely to flow into Asia ex Japan in our view as the Yen weakens (our FX strategists expect the Yen/US$ to fall 110 by end 2013, 120 by end 2014) as the balance sheet expands. As the private sector demand for credit has remained weak in Japan and the banking sector has a very low loan/deposit ratio with little demand for credit, we do think the chances of Japan based investors continuing to buy overseas assets is likely to be high.

Over the last eight years Japanese portfolio flows into equity and debt in the region have been significant. To Asia these have totalled US$36 bn, to Australia, US$93 bn. Flows to debt have dominated – 80% of the total in Asia and 90% of the total in Australia. Indeed in all seven years there have been positive portfolio flows to debt in Asia ex Japan and Australia. Equity flows have been more volatile to Asia ex Japan, and to a lesser extent Australia.

Table 1: Japanese portfolio flows in Asia Pacific

	Asia			Of which ASEAN				Australia		
US$ Bn	Total	Equity	Bonds	Total	Equity	Bonds	ASEAN % of Asia	Total	Equity	Bonds
2005	2.87	0.89	1.74	0.59	(0.10)	0.52	20.6%	5.20	1.72	4.25
2006	6.69	5.70	0.76	2.33	1.28	0.85	34.9%	3.38	2.85	1.20
2007	9.02	3.85	4.91	5.12	3.03	1.82	56.8%	9.95	2.47	7.18
2008	(1.39)	(3.40)	2.13	(0.98)	(0.43)	(0.22)	70.8%	14.06	1.23	13.03
2009	4.86	3.98	0.84	2.52	0.33	1.95	51.9%	25.52	2.40	23.28
2010	4.61	1.10	3.31	3.04	1.66	1.75	66.0%	16.18	0.85	15.18
2011	3.81	(3.44)	7.27	(0.79)	(0.51)	(0.28)		14.41	0.09	16.21
2012	5.62	(2.14)	8.31	3.89	(0.91)	4.86	69.2%	4.21	(0.82)	5.33

Source: CEIC, UBS estimates

While it is difficult to draw the conclusion from the table that a weak Yen would increase capital flows, given that flows in both 2005 and 2006 (weak Yen) were

not especially high with reference to recent years, we would make the assumption that the paucity of yield elsewhere plus the expectation of a weaker Yen will likely make Asian debt look relatively attractive.

This could continue to underpin yield for a period, even if US policy is not getting any easier. From an equity perspective given that retail investors tend to be more momentum driven, we would expect equity flows to be more concentrated on the South East Asian markets where flows were typically stronger over the last two years (as a share of market cap).

Meanwhile as Asian growth picks up, the cyclical break in inflation pressure that we have experienced over the last 12 months is likely to move back in the opposite direction putting upward pressure on domestic interest rates again. All in, we are probably at the trough of the interest cost cycle in Asia, right now.

With a sizeable pick-up in debt, deterioration in external balances and rates being as low as they are likely to get, right now, the credit story is unlikely to get any better than it is right now.

When it ends, Asia’s credit party doesn’t need to end in disaster. To a large extent, the lack of pegged currencies or more importantly, US dollar debt, means that a big external adjustment in FX would not be as likely to have the same calamitous consequences this time around as say in 1997/8.

More likely, rising interest rates interacting with higher levels of debt could cause 1) a fall in the rate of credit growth and consumption and therefore GDP growth 2) the potential for NPLs in the banking system to rise sharply. Both these factors have implications for equities, both in terms of what the market is discounting today.

Credit can keep growing before the party ends. And in the meantime, it is important to recall that asset returns can be very strong running up to the peak of the credit cycle – witness for example the performance of Asian in 1993 (when equities doubled) or 1996 leading up to the start of the crisis, when Asian equities returned 21%. Or the US and European equity markets in 2006 right through July 2007 (S&P 500 up 28% and Euro Stoxx 50 up 34%).

But the key issue to keep in mind is that we are gradually transitioning from a period of strong growth in both income and credit along with low rates, to much higher levels of debt, and critically, rates are probably as low as they are going to get. In other words, we are moving into a more advanced stage of the credit cycle. What does this mean for the equity market, and the sectors that have benefitted the most from the cycle so far?

The equity implications

We see a number of short and longer-term themes that might play out as we enter a more advanced stage of the credit cycle. The first, is the ongoing risk of asset price bubbles. Two, valuations relative to the rest of the world as the growth miracle gets recognised for what it really is: a credit cycle. Three, country performance as higher leverage gets recognised. And four, for the sectors that have benefitted, the impact of a shift to higher interest rates.

1. The bubble risk.

Despite the advanced stages of the credit cycle, often equity performance can be very good. Given the relative value case for equities we think there is a risk that equities froth up in this latter stage

We highlighted back in 2009 that there would likely be an elevated risk of equities going parabolic at some point during this cycle, given the strong growth and cheap money that were all part of this extraordinary monetary environment.

We still believe there is a risk of that. Indeed, if it is going to happen, we think the conditions for this occurring are probably in the next six months: growth is generally recovering, monetary conditions remain super easy, and valuations are not yet at extremes. Risks, generally, seem to be reducing at the global level.

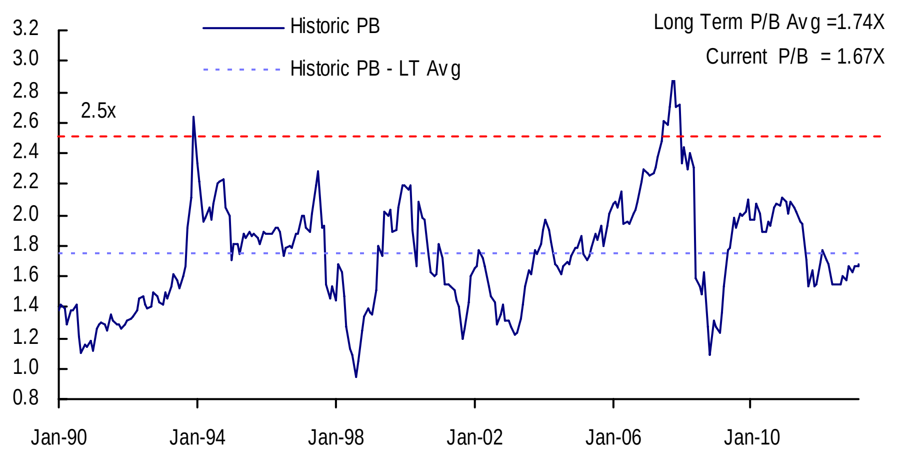
Where in the past we have seen this very much as an Asia ex Japan issue, we have altered our view somewhat more recently. While all markets are likely to be benefiting to some degree from a bubble if it happens, we have reached the conclusion that this is less likely in China, Korea and Taiwan - the latter two because of their export issue and already high debt and lack of credit cycle. The former, partly because it essentially was in bubble in 2007 and we think it is unlikely to go straight back into another bubble.

A second reason is the role of price momentum. As we showed in late 2010, one of the pre-requisites of a bubble is that a market is moving in a pre-parabolic fashion. Today in Asia, there are a number of stocks and when we aggregate this up, countries that are moving into this territory. At the country level, this really applies most to The Philippines and Thailand. Japanese capital flows to these markets could assist that process.

So a shift in our thinking is that if a bubble happens, it might not be felt Asia wide, and because it applies to a smaller part of the market than say in 2007 (when China was 17% of the market), it might not actually drag so much capital into the market overall that it pushes the whole market to extremes.

Generally, we have thought that going to 2.5x P/B plus is the sort of area that Asia might get to in an extreme. This is based on the levels Asian reached in both 1993 and 2007 (see chart 3).

Chart 3: Asia ex Japan – Historical P/BV



Source: Datastream

While this might not happen for the region overall, it could happen to a small number of markets like the Philippines and Thailand. We suspect if this occurs it would in the short term support all the other ASEAN markets with it.

Table 2: ASEAN absolute valuations relative to their historical highs

P/BV	Indonesia	Malaysia	Philippines	Singapore	Thailand
Average (since 1992)	3.12	2.41	2.51	1.72	2.37
Peak	5.84	5.06	5.07	2.49	5.25
Date of Peak	31-Dec-07	31-Dec-93	31-Dec-93	31-Oct-07	31-Dec-93
Latest	4.04	2.14	3.35	1.51	2.52
Price differential from Peak	44%	137%	51%	65%	109%
Forward PE					
Average (since 1992)	12.56	15.66	14.00	15.35	13.78
Peak	24.07	27.16	21.75	22.37	42.96
Date of Peak	30-Nov-93	31-Dec-93	28-Feb-94	31-Dec-93	30-Sep-94
Latest	14.75	14.06	19.34	14.15	12.56
Price differential from Peak	63%	93%	12%	58%	242%

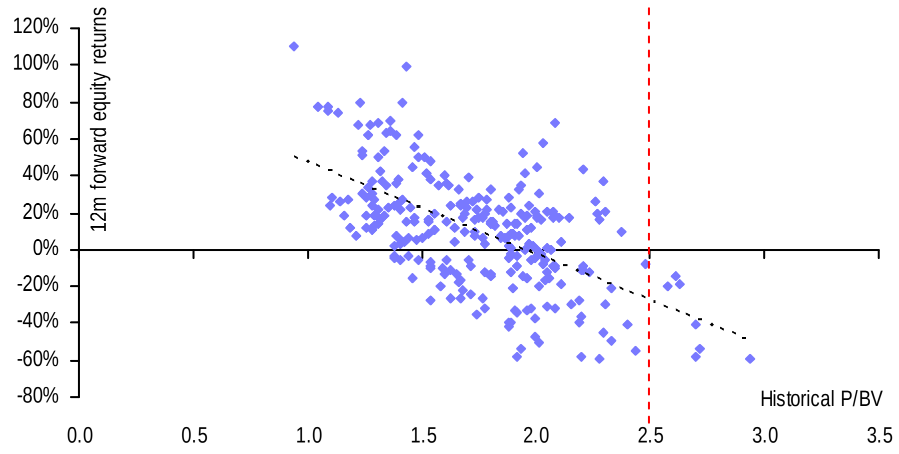
Source: Datastream, UBS estimates

Currently, despite already strong performance in many of these markets, they remain some way below 'peak' valuation levels (of either late 1993 or 2007). The Philippines would need to rise another 51% to get to these levels in P/B terms, and 12% in P/E terms.

There is therefore an elevated risk that in the short-term, the markets go much higher and beyond what fundamentals would warrant, though we recognise it is probably too optimistic to have this extend to markets like China where price momentum and general euphoria of a few years ago have given rise to equal and opposite cynicism.

Unfortunately, if Asian (and especially the percolating markets of the ASEAN) do go into a bubble, sadly, the returns for Asian equities from here are likely to be paltry at best. As we know from history, if markets do go into extended valuation territory, there will be precious little left on the table for future returns.

Chart 4: MSCI AxJ 12m forward returns vs P/BV (since 1990)



Source: Datastream

It is not our base case that Asia or parts of Asia do go into a bubble, but the price action of certain parts of the market and current conditions (which we talked about in our report of 28 January) lend themselves to the risk of market frothing up.

The first implication is that there is a heightened risk of bubbles in the very short-term, especially in the ASEAN markets.

2. Asia versus the World

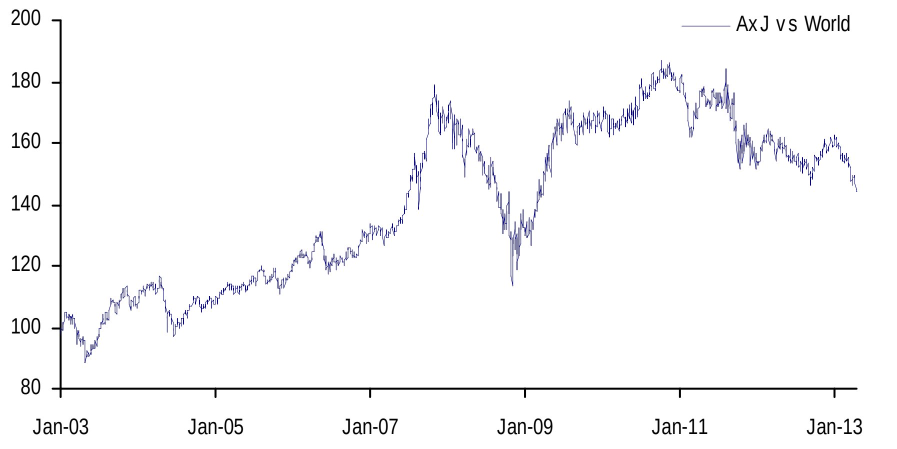
Hindsight is a wonderful thing. Starting in 2003, Asia ex Japan equities delivered their strongest sustained gains of the last 40 years – five consecutive gains averaging 30% of a minimum of 14% in US dollar terms. Asia ex Japan equities roundly trounced global equities by 150% in those five years.

Why? 1) in 2003, Asian equities were undeniably ‘cheap’ on an asset value basis. By our estimate, 40% of the companies in the broad MSCI Asia ex Japan universe (of 400 companies) were trading below their stated book value at that time. 2) With deleveraged balance sheets and cheap currencies, plus the tail wind of reforms from the crisis, the region was enjoying premium growth. This combination of value plus growth is what stood behind Asia’s strong returns.

Today, as we have shown, the deleveraging has given way to releveraging. Although not yet at dangerous levels region wide, credit has risen materially. Meanwhile, trade balances are deteriorating as real exchange rates have appreciated. Finally, though in aggregate, Asian equities are trading slightly below longer-term multiples, they are nowhere near as inexpensive as they were in 2003. Today, only 20% of companies are trading below their stated book value.

It is interesting to note that despite Asia's faster growth in recent years, this is not translating to better performance. We've written about some of the reasons for this – in our view, margin compression is a key challenge in this part of the world. An end to margin compression and a resumption of premium EPS growth will be important to allow Asia to perform better in future (a subject for another day).

Chart 5: MSCI Asia ex Japan relative performance (vs. MSCI World)

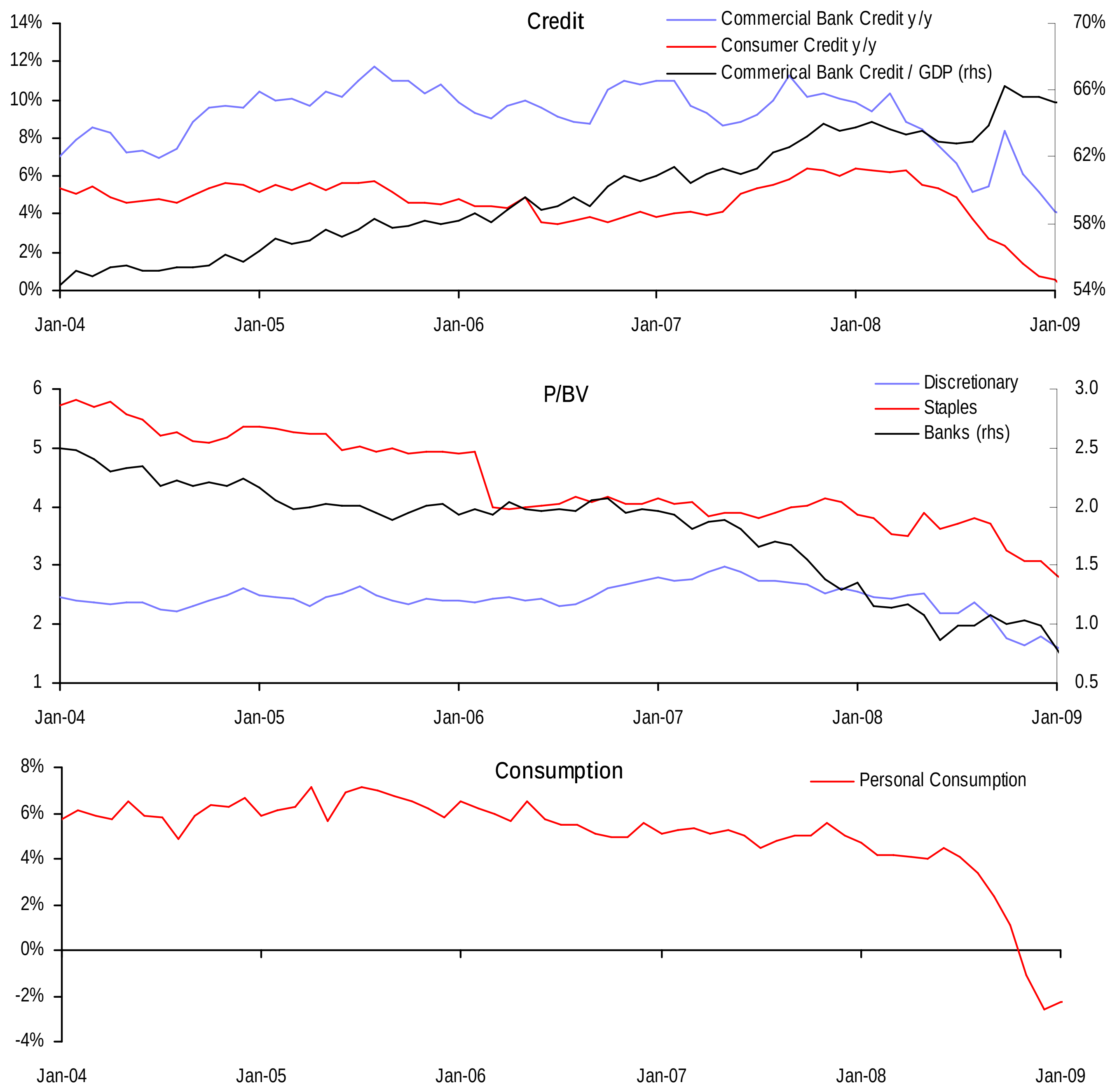


Source: Datastream

The other aspect is valuation. Here, the credit cycle becomes very important. In our view, the market does not over time pay up for 'premium growth' that is in effect turbo charged by credit.

Chart 6 shows the valuation de-rating of the US equity market as credit growth was accelerating in the 2004-7 period. This is mirrored by similar moves in UK (chart 7). Later we show the same issues in China.

Chart 6: US – Credit, P/BV and Personal Consumption

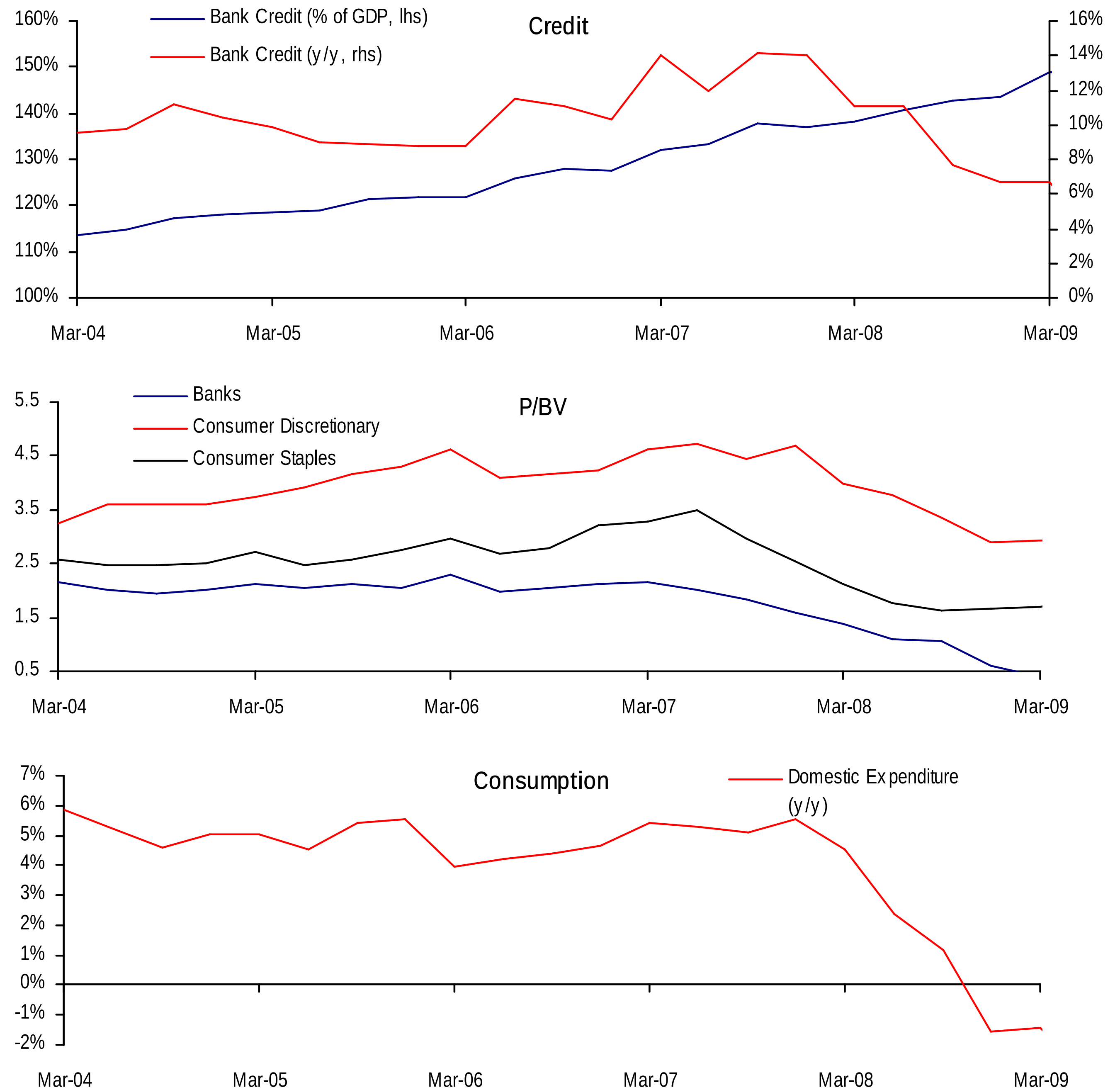


Source: CEIC, Datastream, UBS estimates

The prima-facie evidence would suggest that the market 'pays-up' for growth that is not credit led, but de-rates markets where credit is fuelling growth, rightly recognising that this is unsustainable.

Implication number two, is that the region is not likely in our view to command premium valuations relative to the rest of the world. Indeed as the credit cycle becomes more extended, we expect the region to de-rate relative to the rest of the world. This makes the Asian equity story more dependant than ever on fast EPS growth to sustain relative returns.

Chart 7: UK – Credit, P/BV and Personal Consumption

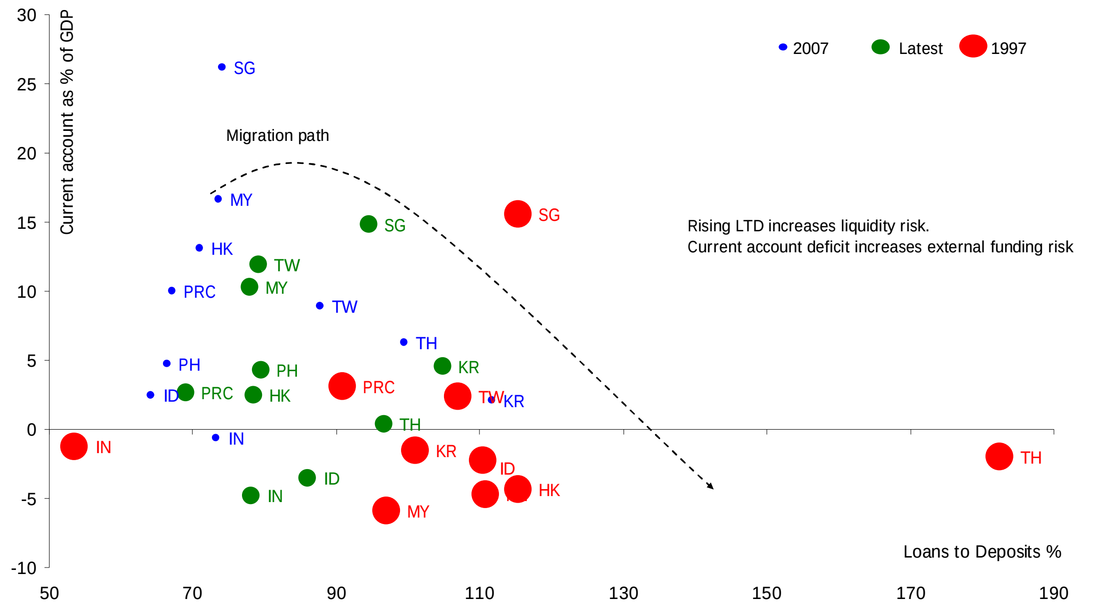


Source: CEIC, Datastream, UBS estimates

3. Countries within the region

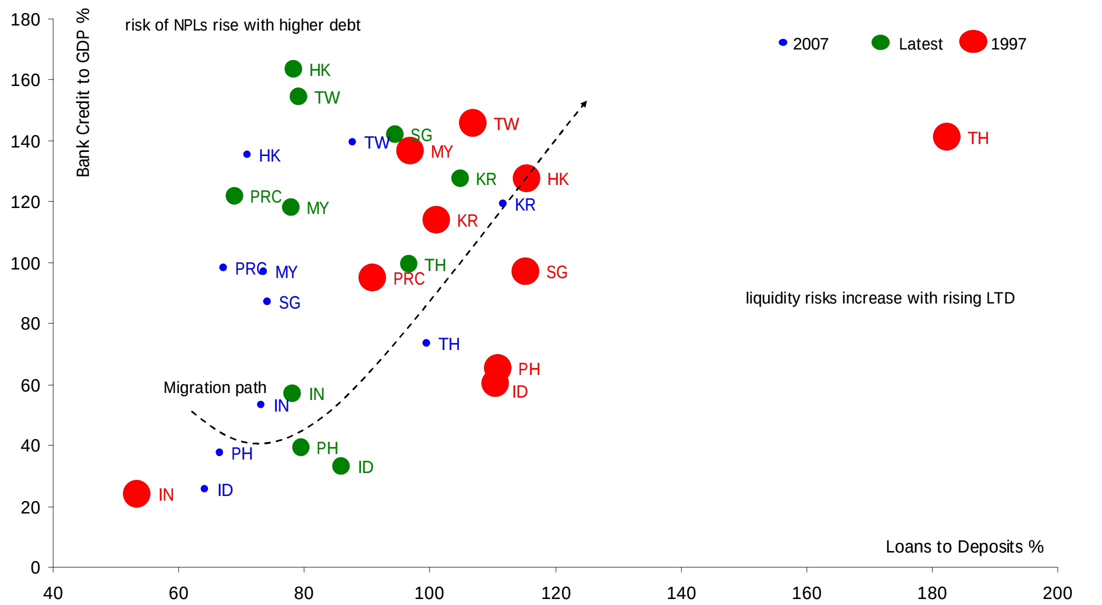
Turning to countries, Charts 8-9 from Duncan summarise the deterioration in liquidity ratios at the banking sector and the external balances of countries as well as the increase in credit to GDP, putting these in the context of the 1997 financial crisis.

Chart 8: External balances vs Loan to Deposits – 1997, 2007 and Latest



Source: CEIC, UBS

Chart 9: Credit to GDP vs Loan to Deposits – 1997, 2007 and Latest



Source: CEIC, UBS

To look at the data in more detail, we have summarised the data in Table 3 showing the current LDR and change since 2007, the change in credit/gdp as well as this as a starting point of credit/GDP, the change in the current account/GDP and finally for some context, the change in valuations.

Table 3: Credit, Trade surpluses and Valuations

	Change in LDR since end-07 A	LDR – latest B	Change in Loan/GDP since end-07 (%) C	Loan/GDP - latest (%) D	Change as % of beginning level F	Change in CA/GDP since end-07 G	CA/GDP 2012e H	P/BV Latest I
Philippines	13.1%	79.6%	1.31	39.1	3.4%	0.5%	4%	3.3
Taiwan	-8.6%	79.1%	14.52	154.1	9.4%	1.6%	12%	1.8
India	5.0%	78.1%	3.53	57.0	6.2%	-4.3%	-5%	2.6
Korea	-6.7%	104.9%	8.31	127.7	6.5%	3.4%	5%	1.2
Malaysia	4.3%	78.0%	20.87	117.7	17.7%	-6.5%	10%	2.1
China	1.8%	69.0%	22.84	121.3	18.8%	-5.4%	3%	1.6
Indonesia	21.8%	86.0%	6.61	32.0	20.6%	-6.5%	-4%	4.0
HK	7.4%	78.4%	26.64	161.9	16.5%	-7.7%	2%	1.4
Singapore	20.5%	94.6%	66.40	264.6	25.1%	-2.2%	15%	1.5
Thailand	-2.8%	96.7%	26.31	99.8	26.4%	-8.8%	0%	2.5

Source: CEIC, Datastream, UBS estimates

In terms of loan/deposit ratio, Singapore and Indonesia have seen the biggest deterioration since the end of 2007. Only Korea and Taiwan have seen improvements, partially reflecting the lack of credit growth in those economies to some degree. We did not expect Taiwan nor Korea to participate in the credit cycle.

There are of course difficulties using such data – for example, interbank deposits can be double counted, and other banks with specific restrictions on lending around the LDR may find ways to increase assets even without showing loan growth (for example Chinese wealth management products).

There has however been a broad deterioration in the LDR across the region, though it remains still for the most part below 100%.

At the same time, credit/GDP has risen sharply in most countries. The largest increases are in Singapore, China, Thailand and Hong Kong. We also however look at the ratio of the increase in credit, relative to the size of credit/GDP in the first place – the delta is as important in many instances as the actual increase.

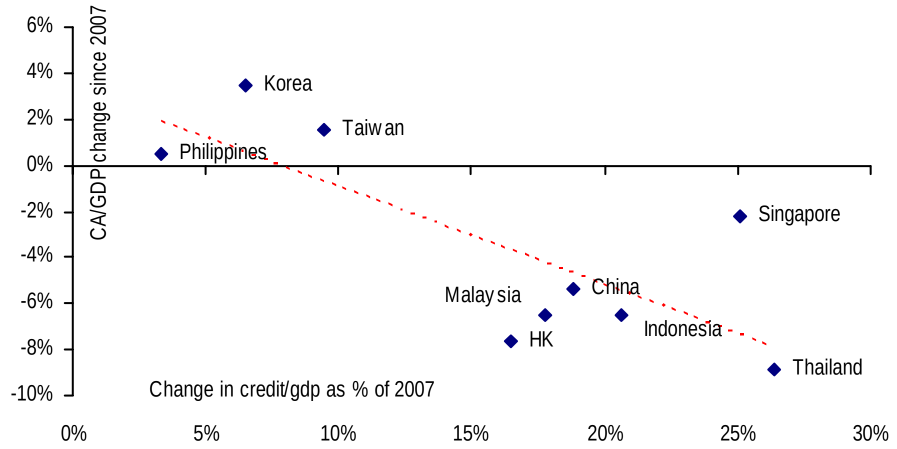
On this measure, Thailand, Singapore and Indonesia look the worst, while the Philippines, Korea, India and Taiwan look more moderate.

To us this latter relationship shows the best fit compared the deterioration in the external balance, or current account. Chart 10 shows the relationship for the ten countries between the increase in credit/GDP and their current account change since end 2007.

In general there is a relationship as there ought to be between these data points. They suggest that much further increases in credit are likely to bring about

substantial deteriorations in c/a balances, to the extent, that the region could well be running current account deficits more broadly.

Chart 10: Current account deterioration versus change in Credit/GDP (ex India)



Source: CEIC, UBS estimates

Finally, we show the aggregate 'score' of all countries based on an equal weighting of each factor (from Table 4) as well as relative valuation. This is quite simplistic and just indicative of the overall score a market is likely to get. One reason for this is that the different metrics carry varying levels of significance for the different markets but this framework treats them equally.

Table 4: Ranks - Credit, Trade surpluses and Valuations (based on the data in table 3)

	A	B	C	D	F	G	H	Overall	Valuation (Column I)
Philippines	3.0	5.0	10.0	9.0	10.0	8.0	6.0	7.3	2
Taiwan	10.0	6.0	6.0	3.0	7.0	9.0	9.0	7.1	6
India	5.0	8.0	9.0	8.0	9.0	6.0	1.0	6.6	3
Korea	9.0	1.0	7.0	4.0	8.0	10.0	7.0	6.6	10
Malaysia	6.0	9.0	5.0	6.0	5.0	3.0	8.0	6.0	5
China	7.0	10.0	4.0	5.0	4.0	5.0	5.0	5.7	7
Indonesia	1.0	4.0	8.0	10.0	3.0	4.0	2.0	4.6	1
HK	4.0	7.0	2.0	2.0	6.0	2.0	4.0	3.9	9
Singapore	2.0	3.0	1.0	1.0	2.0	7.0	10.0	3.7	8
Thailand	8.0	2.0	3.0	7.0	1.0	1.0	3.0	3.6	4

Source: CEIC, Datastream, UBS estimates

In general, the ASEAN markets score badly – obviously the credit expansion has been going on in full swing in this part of the region. At the same time they also rate badly on valuations – as being most expensive.

Thailand fares the worst on this ranking with a Loan to GDP ratio of close to 100% and a LDR ratio of 97%. The current account surplus has narrowed by almost 8% points since mid 09. Singapore also fares badly on this score despite

its still positive trade surplus. The much lower Loan/GDP ratio in Indonesia and The Philippines make them look better compared to their peers.

Contrary to this, the markets that look best on this framework are the north Asian markets of Korea and Taiwan – where we saw very little chance, if any, of a credit cycle playing out and indeed that has actually been the case.

India, has also seen credit expand much less aggressively, though its liquidity ratios have deteriorated. Again we have not really seen India as being a participant in this credit cycle for a variety of reasons in part due to cleaning up problems associated with the last cycle.

Clearly, the credit cycle can go a lot further in The Philippines than elsewhere, but the market is paying up for this right now.

While we understand the de-rating that has occurred in China, we think the re-rating that has occurred in some other countries that have also witnessed a dramatic increase in credit (especially Indonesia, Singapore and Thailand) and worse, a meaningful deterioration in their external balances, is a potential problem. It is not just China that has embarked on a major credit expansion. But so far it is mainly China that has paid the valuation consequences of this. So far.

If credit growth continues to be as strong as it has been, we should expect deterioration in liquidity ratios, current account balances. As this happens, we doubt premium valuations will be sustainable. What has happened in China (which doesn't have an aggregate liquidity problem yet, nor current account deficit) will likely be repeated in terms of valuation.

Implication number three, is that many of the darling markets of the region today, are in fact seeing their growth being fuelled by credit. Over time, this is likely to become more noticeable as external balances almost certainly deteriorate and liquidity becomes less stable. China has already shown the path to derating that others are likely to tread. The risk of short-term bubbles aside, we would be increasingly worried over time about valuation compression in other fast credit growth markets, such as Thailand, Singapore and Indonesia longer-term. .

4. Sectors

Turning away from the market overall, and countries, to sectors, we look at all three of the banks, property and consumer sectors – the sectors that we thought would do well as the credit cycle advanced through its early phases.

To us, the key issues now are 1) how much of the good news of the credit cycle is priced in, and 2) how might the dynamics change as rates start to creep up?

A. Property

Property stocks have performed well so far in this cycle as residential prices have scurried higher in response to low rates and high growth. Clearly, this sector is very vulnerable to a rise in interest rates (and other policy measures), especially given the build up of mortgage debt and credit so far in this cycle. A potential pick up in bond yields is also a potential challenge for cap rates for landlords at some point.

Rate sensitivity

Table 5 from Kim Wright, our global and regional head of property research, shows the affordability rates for residential property in each market where we have data, and how much this will change given a 200 basis point rise in mortgage rates.

Table 5: Mortgage/Income sensitivity across Asia

	Affordability A	Affordability after 200bps rise in mortgage rates B	Change in affordability C = B - A	Change in affordability as % of (ex mortgage) disposable income C / (100% - A)
Philippines	60.5%	68.6%	8.1%	20%
HK	47.2%	58.6%	11.4%	22%
Thailand	45.5%	53.9%	8.4%	15%
Malaysia	45.2%	55.1%	9.9%	18%
China	45.0%	52.2%	7.3%	13%
Singapore	31.1%	38.2%	7.1%	10%
India	31.0%	35.2%	4.3%	6%
Indonesia	29.8%	33.4%	3.6%	5%

Source: Centaline, CEIC, National Housing Bank Residex, AREA, National Statistics Office, Bangko Sentral Ng Pilipinas, Urban Development Authority, National Property Information Center, Real Estate Economics Institute, UBS Global property team & their estimates

Although property prices have risen sharply in many countries, generally affordability rates remain okay relative to history. Monthly mortgage costs/income have actually fallen in many places over time and for most remain below 50%.

However, this is against the backdrop of low rates. Stressing this for a 200 basis point increase in mortgage rates shows the vulnerability of incomes to a rise in rates. Hong Kong, Malaysia, Thailand and the Philippines would see affordability ratios rise by around 10 percentage points, and lift affordability ratios above 50%. More concerning is that the increase in affordability rates, would cause a big drop in ex mortgage cost disposable incomes in a number of

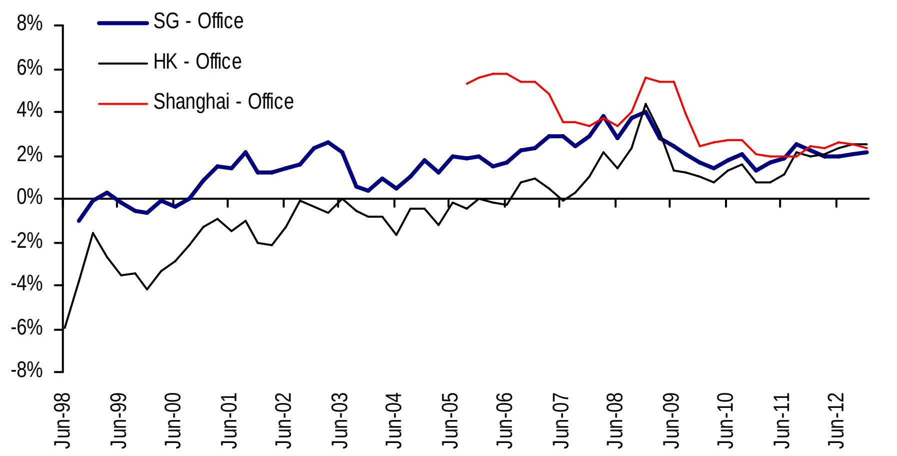
countries. For example in Hong Kong and the Philippines, the drop in ex mortgage cost disposable income would be over 20%.

Neither Hong Kong nor Singapore are at particular risk of policy rates moving higher, though in Hong Kong, capital restrictions from the HKMA mean that the risk to mortgage spreads is tilted higher. In Singapore the rapid run through of the banking system's liquidity could create similar market based rises in rates.

Elsewhere, the greater risks are around the re-emergence of inflation, particularly in the ASEAN. We would be most concerned here about Indonesia, and Thailand. Less so the Philippines. Finally in China, there is a greater risk of policy tightening ahead, given the rebound in property activity since last year.

For the landlords (more Hong Kong and Singapore), it is also worth keeping in mind that long-rates are also unlikely in our view to get any lower than they currently are. This has implications for cap-rates. In effect, discount rates are likely to be going up not down from here. There is traditionally a good link between bond yields and cap rates.

Chart 11: Capitalization rates (Office investment yields) less 10 year Bond yields

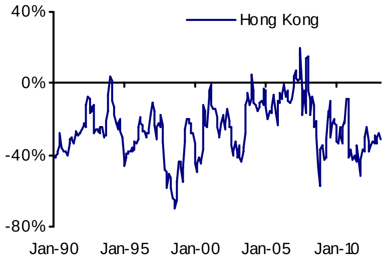


Source: Jones Lang LaSalle, Bloomberg

Kim and the team think there is greater vulnerability here for Singaporean landlords than in Hong Kong. In the former, cap rate compression to bond yields is tighter, while in the latter, there is more scope for a rise in bond yields to be absorbed.

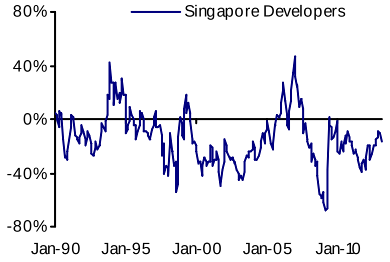
In terms of valuations, charts 12 – 14 shows the Price/NAV for Singapore, Hong Kong and China property developers. Right now, discounts to NAV are in line with historical averages. So although rates may have troughed, at least valuations are still okay for now.

Chart 12: Premium/Discount to NAV - Hong Kong



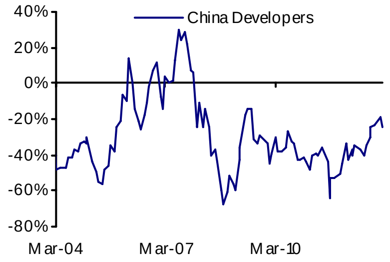
Source: UBS estimates

Chart 13: Premium/Discount to NAV - Singapore



Source: UBS estimates

Chart 14: Premium/Discount to NAV - China



Source: UBS estimates

Putting this all together, Table 6 shows a heat map of a) the hot spots where rates might rise b) current affordability rates, c) the sensitivity of this underlying asset to rising interest rates in terms the ex mortgage cost change in disposable income from a 200 basis point rise in interest rates d) the growth in credit e) the valuation discount to NAV (and colour coded for whether this is high or low in a historical context with blue being a high discount, red being low) e) the valuation in simple P/B terms relative to the market compared to history (blue good, red bad).

Table 6: Vulnerability for Asian Property

	Interest Rates	Affordability (Mortgage/Income, %)	Change in affordability as % of (ex mortgage) disposable income after 200 bps rise in mortgage rates	Loans / GDP – change as % of end-07 level	P/NAV	P/BV
HK	Mortgage tightening measures?	47.2	22%	16.5%	-31%	0.8
Singapore	Mortgage tightening measures?	31.1	10%	25.1%	-17%	1.1
China	Mortgage tightening measures?	45.0	13%	18.8%	-24%	1.3
Indonesia	5.75%	29.8	5%	20.6%	4%	
Thailand	2.75%	45.5	15%	26.4%		
Malaysia	3.00%	45.2	18%	17.7%	-22%	2.0
Philippines	3.50%	60.5	20%	3.4%	-7%	5.1
India	7.50%	31.0	6%	6.2%	-42%	1.1

Source: * - only bank lending; Centaline, CEIC, National Housing Bank Residex, AREA, National Statistics Office, Bangko Sentral Ng Pilipinas, Urban Development Authority, National Property Information Center, Real Estate Economics Institute, UBS Global property team & their estimates

Other than the increase in credit, the Philippines looks bad on all measures – vulnerability to rate increases, valuation. Malaysia also looks poor. The vulnerability in Hong Kong to rising mortgage costs is at least reflected in valuations, which look somewhat attractive. China comes out looking better than many countries, partly because affordability ratios are not as bad as the rest of the region, and valuations are attractive. Singapore doesn't look too bad on our measures, though Kim and the team are more nervous there than our data would suggest. Finally, India, which is working off the excess of the last credit cycle, looks good on most measures.

Overall sector implication: rising rates do create a fundamental headwind over time for this sector. The good news is that the rate of increase is likely to be modest, albeit the direction is negative, over the next 12 months. Unfortunately,

from a rates perspective, life is probably as good as it gets for this sector. On a more positive note, valuations look okay. Philippine property stocks look expensive, and vulnerable to eventual tightening. Hong Kong is also vulnerable, but more reflected in valuations.

B. Banks

Banks have performed well across this credit cycle, reflecting strong credit growth and reasonable starting valuations. As the cycle progresses however, we would expect credit growth to slow, but margins could start to shift as both the yield curve potentially steepens and rates go up. Finally, the big issue for this sector is the extent to which NPLs are going to show-up based of the fast clip in loan growth hitherto.

Loan growth has been strong across the sector. Table 7 shows asset growth (for simplicity) across each banking system since the end of 2008 and the increase in earnings over the same period.

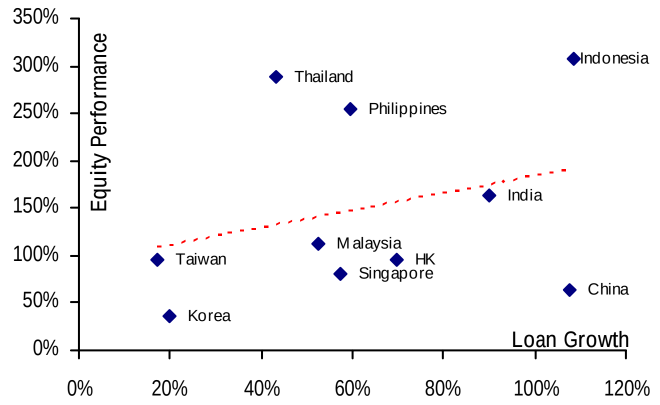
Table 7: Asian Banks - Loan and EPS growth

Banks	Asset Growth (%)	EPS growth
China	107.6%	109.5%
HK	69.5%	21.0%
India	89.9%	180.6%
Indonesia	108.4%	155.5%
Korea	19.9%	0.3%
Malaysia	52.5%	54.9%
Philippines	59.6%	115.8%
Singapore	57.5%	35.0%
Taiwan	17.2%	85.8%
Thailand	43.2%	179.5%

Source: Datastream, CEIC

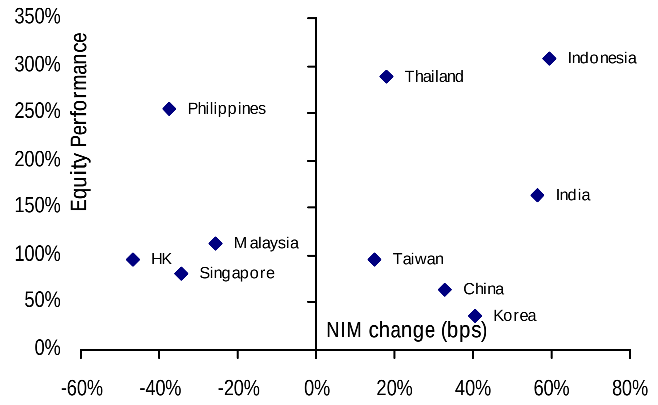
When we look at the performance of bank stocks in the region from end 2008, there has been a clearer relationship between performance and loan growth (charts 15-16) than performance and changes in net interest margins. Clearly this does not hold across the board – for example, there can be too much of a good thing in terms of growth as the Chinese banks showed.

Chart 15: Banks – Asset Growth vs. Equity Performance (local currency, since 08 end)



Source: Datastream, CEIC

Chart 16: Banks – NIM change vs. Equity Performance (local currency, since 08 end)



Source: Datastream, CEIC

As rates gradually start to rise over the cycle we would expect credit growth to begin to moderate. On the other hand, we would also expect to see margins begin to react to shifts in interest rates.

Generally, the flat yield curve and low rates have combined negatively for the banks. Looking ahead, given that excessive credit growth is likely to bring with it worsening macro (ie. as we showed, worsening current accounts) we think strong loan growth could actually start to become more of a problem in certain countries.

At the same time, as the yield curve and short-term interest rates move up gradually, this could be beneficial to certain banks in the region.

Table 8 shows a simplistic way of thinking about the banks. We show the loan/deposit ratio for the banks (we have excluded Taiwanese, Korean and Indian banks who we don't think have really been part of this credit cycle, and Chinese banks, where interest rate policy hitherto has mattered less) as well as their basic sensitivity to a 10 basis point increase in NIMS. This latter calculation is very approximate as it does not take into account issues like cost growth, or risk assets etc. Generally – and very generally – lower loan/deposit rate banks should benefit in an environment of rising rates. Higher LDR banks have a greater tendency to suffer from margin squeeze (it does not always hold).

So, as Table 8 shows, in theory HK banks and certain Indonesian banks (UBS Key Call BNI among them) should benefit from rising rates. By contrast, there might be more of a challenge for Thai banks over time.

Table 8: EPS sensitivity to a +10 bps change in NIMs & Loan to Deposit ratio

	Country	Rating	PT upside	2013E LDR	% increase in EPS (+10 bps NIM)
BOC (HK)	Hong Kong	Sell	-8.2%	68.4%	7.4%
Hang Seng Bank	Hong Kong	Sell	-10.0%	70.9%	3.7%
Wing Hang	Hong Kong	Neutral	-0.4%	71.1%	9.8%
HSBC	Hong Kong	Neutral	7.8%	74.4%	7.6%
Standard Chartered	Hong Kong	Buy	18.9%	78.6%	6.7%
BEA	Hong Kong	Neutral	9.8%	80.2%	10.7%
Dah Sing	Hong Kong	Neutral	5.1%	84.5%	13.7%
BCA	Indonesia	Neutral	6.5%	72.6%	2.4%
BNI	Indonesia	Buy	12.6%	81.2%	3.1%
Rakyat	Indonesia	Buy	18.3%	83.1%	2.2%
Bank Jabar	Indonesia	Buy	19.1%	85.0%	3.9%
Mandiri	Indonesia	Neutral	-2.0%	85.3%	2.7%
BTPN	Indonesia	Buy	17.6%	86.2%	1.9%
BTN	Indonesia	Neutral	5.4%	100.9%	4.7%
Danamon	Indonesia	Neutral	-0.8%	128.8%	2.6%
Hong Leong Bank	Malaysia	Sell	-2.9%	73.5%	6.4%
Alliance FG	Malaysia	Sell	-18.4%	80.7%	5.7%
RHB	Malaysia	Neutral	-2.9%	82.1%	7.6%
CIMB	Malaysia	Neutral	-6.2%	87.0%	5.8%
Public Bank	Malaysia	Neutral	4.5%	88.3%	5.0%
Maybank	Malaysia	Buy	15.3%	91.0%	5.7%
AMMB	Malaysia	Buy	26.5%	100.3%	4.9%
BPI	Philippines	Suspended		75.7%	4.2%
Metrobank	Philippines	Suspended		79.5%	5.6%
BDO	Philippines	Buy	0.9%	90.1%	6.1%
UOB	Singapore	Neutral	-0.9%	86.4%	7.8%
OCBC	Singapore	Buy	2.0%	86.6%	7.9%
DBS	Singapore	Buy	8.0%	89.1%	8.7%
BBK	Thailand	Buy	10.1%	89.1%	5.1%
TMB Bank	Thailand	Sell	-6.3%	92.6%	8.4%
KTB	Thailand	Buy	18.5%	93.5%	5.4%
SCB	Thailand	Buy	15.5%	93.5%	3.7%
Kbank	Thailand	Buy	21.2%	95.1%	3.8%
TISCO	Thailand	Neutral	-4.1%	110.2%	5.4%
BAY	Thailand	Buy	20.0%	119.4%	4.6%

Source: UBS estimates

While for now rates remain low and so this is not an actual issue, we do think for longer-term investors, it will pay to start thinking both about this theme now, but also the likelihood that much higher loan growth in countries where credit

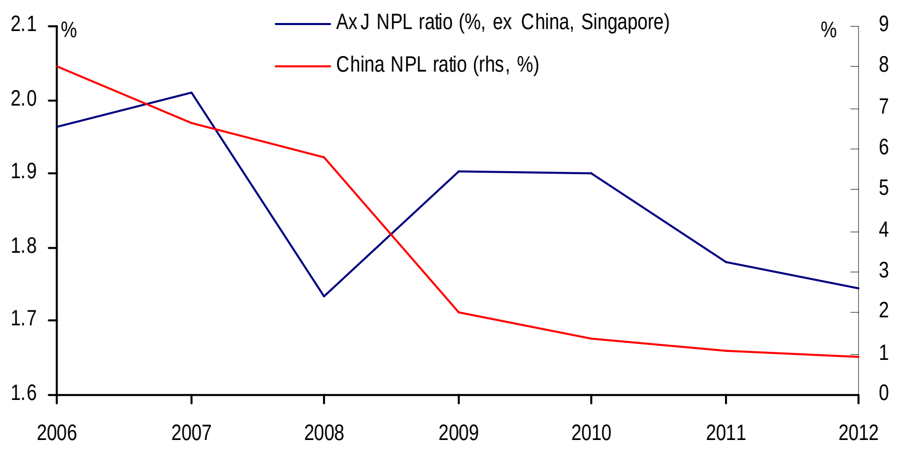
has expanded rapidly already in the last few years, might actually be more of a challenge.

The longer-term de-rating of banks

By far the bigger issue for the banks longer-term however is the degree to which they will pay a price for fast loan growth in the shape of much higher NPLs.

Currently, NPLs systemwide have remained very low. Chart 17 shows NPLs for the banks in Asia ex Japan, with and without China.

Chart 17: NPL / Assets – AxJ (ex China/Singapore) and China

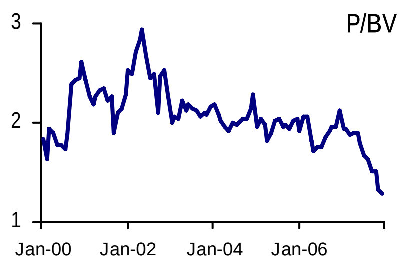


Source: UBS estimates

What we know from previous credit cycles is that as the credit gets digested at a faster rate, valuations in the banking sector respond negatively – they de-rate. This happens as the market takes the view that the best leading indicator of future NPLs tomorrow is high loan growth today.

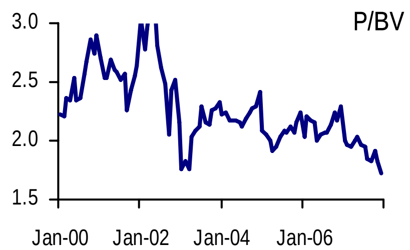
This was for example the experience of the Irish and UK banks going into the credit crisis and also the Thai banks going into the Asian Financial Crisis. In all instances, the sectors were de-rating as the credit cycle progressed. It is also worth noting that most of the capital losses happened as the system found itself in crisis – not before.

Chart 18: Irish banks – average P/BV (2000-07)



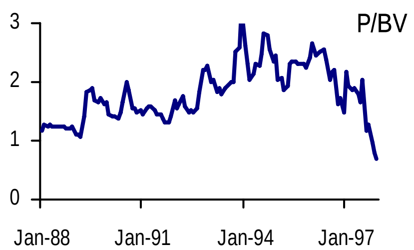
Source: Datastream, UBS

Chart 19: UK banks – average P/BV (2000-07)



Source: Datastream, UBS

Chart 20: Thai banks – average P/BV (1988-97)

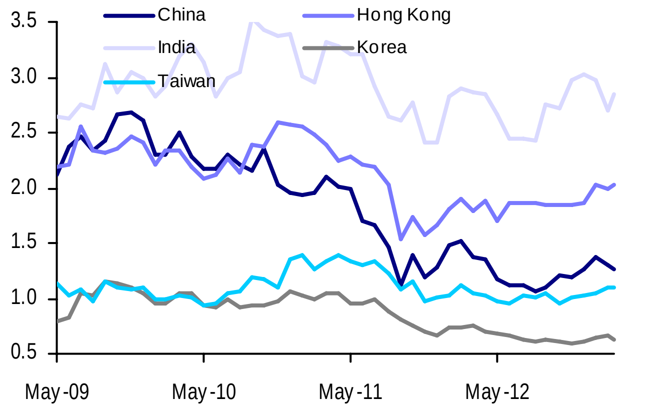


Source: Datastream, UBS

Right now, the process of de-rating has become evident especially in the Chinese banks and to a lesser extent the Hong Kong banks. By contrast, most

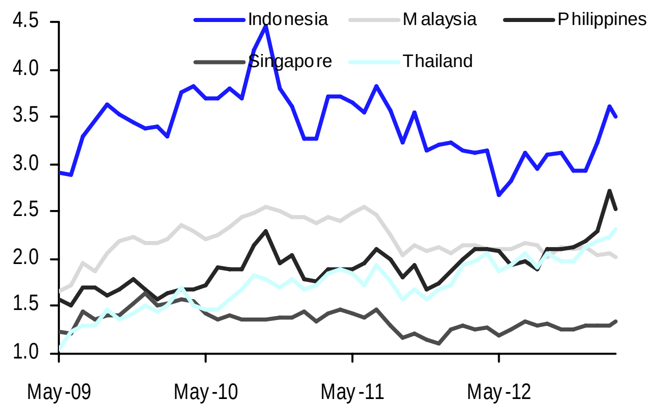
ASEAN banks have re-rated – this despite the large increases in both credit and deteriorations in liquidity ratios.

Chart 21: Historical Price to book – Banks (Asia ex ASEAN)



Source: Datastream

Chart 22: Historical Price to book – Banks (ASEAN)



Source: Datastream

Despite the longer-term de-rating that follows a major credit build up, there can be vicious re-ratings of banks along the way for cyclical reasons – for example, the rebound in valuations in late 1996 in Thailand, or in late 2006 in both Ireland and the UK. This is one of the reasons we liked the Chinese banks last year – for that cyclical rebound, which we thought would happen as the economy stabilised. However over time, the market recognises that the greater degree of credit in the system, the more the questions will be asked over the quality of the book.

So who looks most vulnerable over time? Although most banks in the region look fine in terms of capital ratios and liquidity for now (see table 9), we do think that as the credit cycle progresses, valuations will be unlikely to re-rate with ROE.

Table 9: Banks valuations, LDR and Credit / GDP

	Change in Loan/GDP since end-07 (%)	Loan/GDP - latest (%)	Loan/GDP - change as % of 07 level	Loan Growth since 2007 (%)	P/BV - latest
China	22.84	121.29	18.8%	107.6%	1.3
HK	26.64	161.87	16.5%	69.5%	1.9
India	3.53	56.95	6.2%	89.9%	2.8
Indonesia	6.61	32.03	20.6%	108.4%	3.5
Korea	8.31	127.66	6.5%	19.9%	0.6
Malaysia	20.87	117.70	17.7%	52.5%	2.0
Philippines	1.31	39.06	3.4%	59.6%	2.5
Singapore	66.40	264.65	25.1%	57.5%	1.3
Taiwan	14.52	154.11	9.4%	17.2%	1.1
Thailand	26.31	99.77	26.4%	43.2%	2.2

Source: Datastream, UBS

The well-understood de-rating of Chinese banks seems clear in the context of the increase in credit. However, both Indonesia and Thailand stand out to us as banking sectors that have re-rated with the increase in credit. Finally, Singapore where we've seen a substantial increase in credit and deterioration in liquidity ratios, the banks haven't re-rated, but that would to us appear to be likely to remain that way.

The market has already figured out that credit growth in China may be unsustainable and may come at the expense of high NPLs. Hence the de-rating. After a cyclical pick up in valuations last year, we would expect that to gradually reverse over time.

The smaller markets which have seen very substantial credit growth in recent years have seen re-ratings, or stable but high multiples. While this does not appear to be at much short-term risk, over time, we would question the willingness of the market to re-rate further credit growth. Structurally on this basis, both Indonesia and Thailand would appear vulnerable.

Overall sector implication: We think the investors should start thinking about about rate increases, and steeper yield curves and the impact this could have on profitability, and less about asset growth. Asset growth if sustained, is likely to have lower marginal benefit given that it tends over time if extreme to lead to de-rating. Longer-term, while most banks look okay for now overall, it is unlikely in our view that valuations will sustainably move higher across the cycle, for the region overall. Meanwhile, cyclically, the rebound in Chinese banks valuations to us looks likely over. If credit growth continues at the current pace, valuations might also start to de-rate in some of the SE Asian markets.

C. Consumer Stocks.

Of all the segments that we identified back in 2009, this is the segment that has worked best, especially in SE Asia. Consumer stocks have found themselves (particularly in the case of staples) at the cross hairs of two strong and popular themes – the rise of the Asian consumer, and the desire for 'quality' management.

While we understand the current fashion of the latter, we think the market is most at risk on the former. Demographics haven't changed much in recent years. And as we showed earlier, real exchange rates have appreciated, or put a different way, export growth has actually slowed. The big shift in consumption in our view has been (one way or the other) through credit.

We believe the market is not recognising that the Asian consumption theme is to some extent is the Asian credit cycle in disguise.

Backing our current implied revenue growth rates for consumer stocks in Asia ex Japan, and comparing this to the summer of 2009 we can see that there has been about a 350 basis point increase in implied revenue growth rates for Asian consumer stocks[1]. We think investors should be careful of over-extrapolating

[1] For the UBS covered stocks, we use our Reality Check framework to calculate the implied growth rates in July 2009 and today. Please see Appendix III for more details.

recent growth rates into the future for consumer stocks given that some of the demand increase is due in part to credit growth.

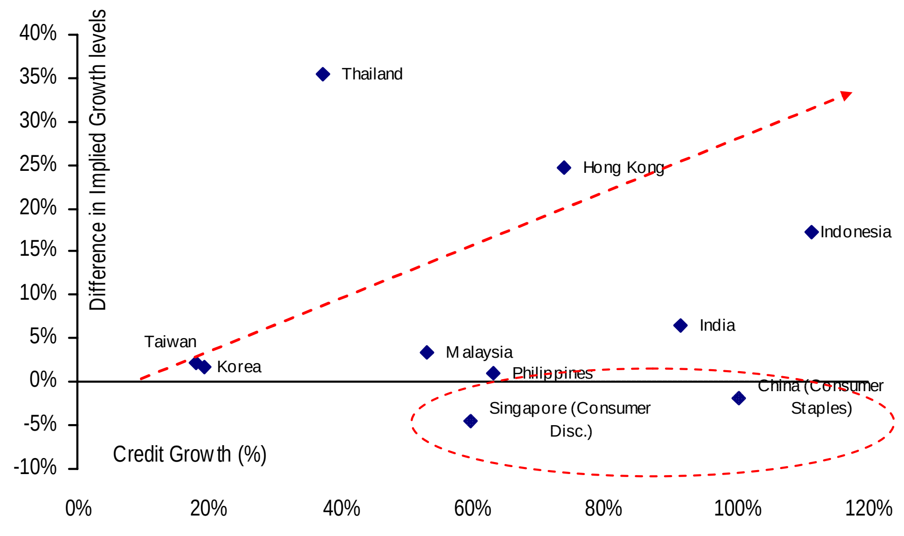
Table 10:Change in implied growth rates for Consumer sectors (market cap weighted) and Credit Growth since Jul'09

	Jul 09	Today	Bank Loan Growth (%) – Jul'09 until latest
China (Consumer Disc.)	9.5%	-7.8%	100.3%
China (Consumer Staples)	26.1%	24.3%	100.3%
Hong Kong	-11.9%	12.7%	74.0%
India	21.6%	28.2%	91.5%
Indonesia	1.6%	19.0%	111.3%
Korea	0.8%	2.5%	19.3%
Malaysia	6.2%	9.5%	53.1%
Philippines	20.4%	21.4%	63.3%
Singapore (Consumer Disc.)[2]	4.1%	-0.3%	59.7%
Singapore (Consumer Staples)[3]	7.9%	-39.7%	59.7%
Thailand	-6.8%	28.6%	37.3%
Taiwan	14.2%	16.5%	18.0%
AxJ	9.7%	17.0%	96.0%

Source: UBS estimates

We are not suggesting that consumers are buying toothpaste on credit. But credit is driving consumption over and above the other drivers of growth. In our view it is turbo-charging the rise in GDP right now and overall living standards.

Chart 23: Change in implied growth rates for Consumer sectors (market cap weighted) and Credit Growth since Jan'09 *(until Jan'13, based on table 10 above)*



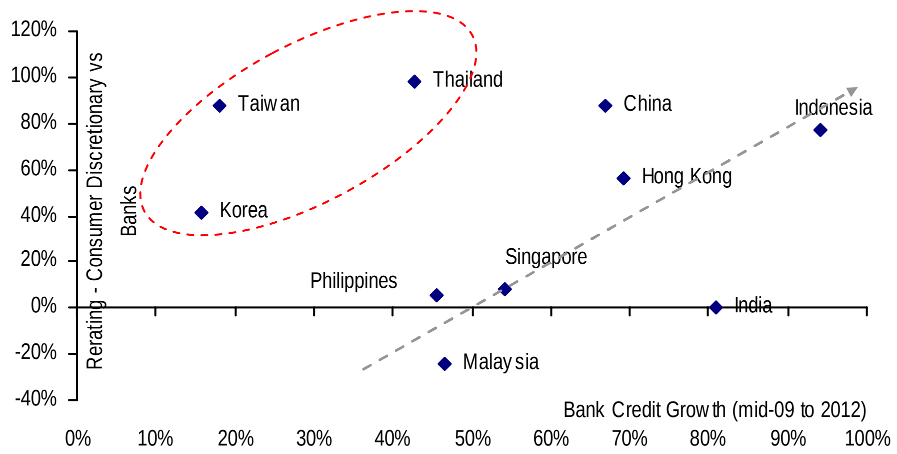
Source: UBS estimates

[2] Singapore Press

[3] Largely due to the derating of Wilmar and Indofood Agri

Whilst we understand the obvious reluctance to 'pay up' for banks, we do think that Chart 24 is interesting – the general de-rating of banks in the region while the consumer stocks have gone from strength to strength. And this often in countries like Indonesia and Thailand where credit growth has been very strong.

Chart 24: Banks derating (relative to Consumer Discretionary, mid 09 – end 2012) vs Bank Credit Growth (mid 09 - end 2012)



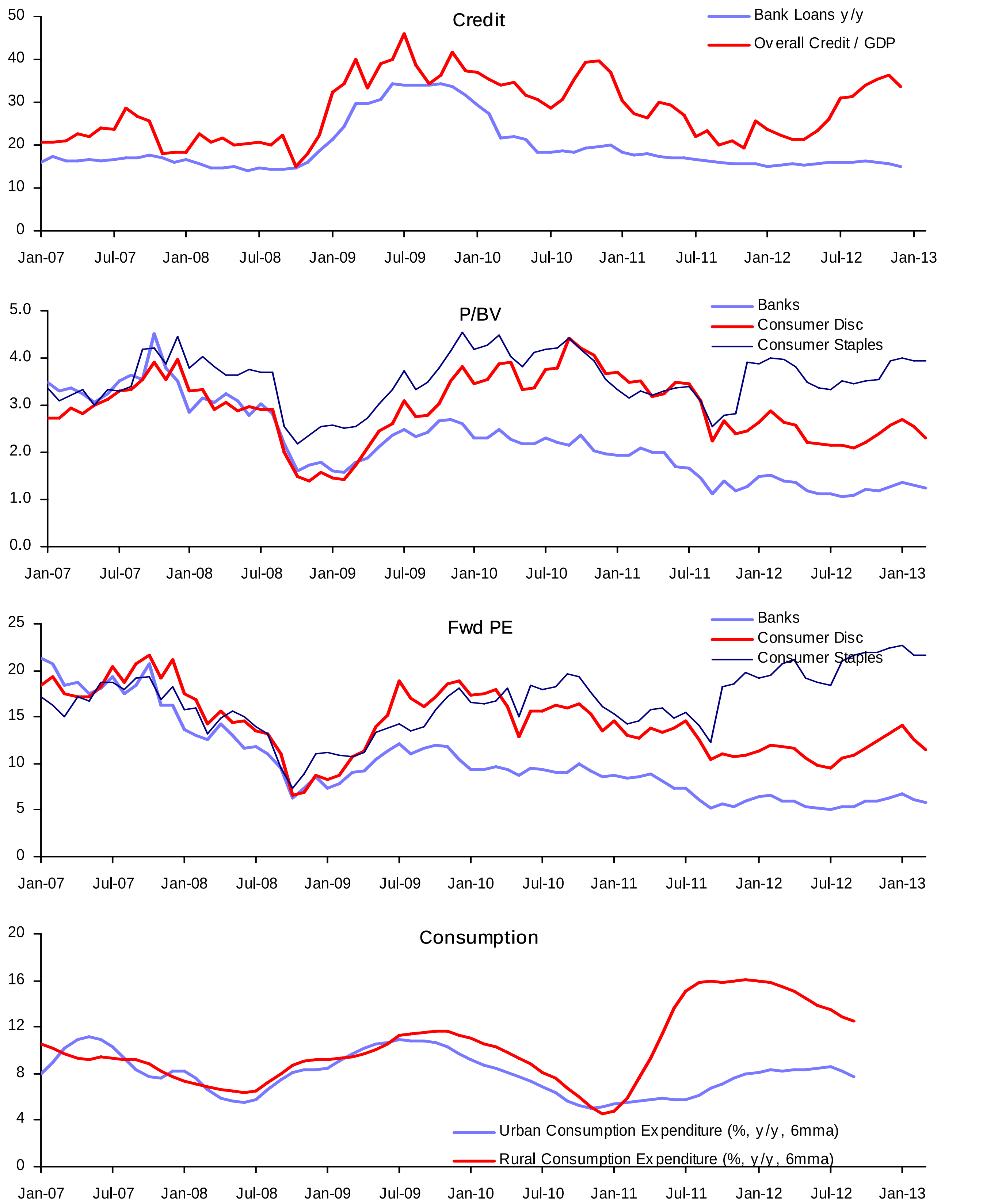
Source: UBS estimates

Chart 24 shows the growth in bank loans since mid-09 plotted against the change in relative valuation of Consumer Discretionary stocks versus the Banks (versus mid-2009). Banks have de-rated relative to the Consumer stocks across the region, except in Malaysia and India. This de-rating has been more extreme in the markets where credit growth was the strongest, for example, Indonesia and China. This has been the case in Taiwan also where the consumer stocks benefitted more from the cross-straits relations than their domestic credit dynamics. As we had expected this rerating of consumer versus the bank stocks was less strong in Korea where we did not expect credit growth to be as strong.

This link between credit growth and consumption does appear to have been made in China for example. Chart 25 illustrates the China example. The first chart shows the year on year growth in bank loans and the overall credit as % of GDP (including RMB/FX loans, off balance lending and corporate bonds). The second and third charts show the valuations of the Banks and the Consumer Discretionary and Staples sectors. The last chart shows the growth in Urban and Rural Consumption.

After the strong surge in credit just after the Global Financial Crisis, the economy picked up and so did the valuations of the banking stocks. But this euphoria was short lived. By as early as 2010 Chinese banks started de-rating again. The price to book and forward PE charts show the divergence in the valuations of Banks and Consumer related stocks in China. While the market was quick to realize that strong credit growth was unsustainable and the risk of NPLs rose in the case of banks, Consumer sectors held up for slightly longer until late 2010. This was a puzzle to us at the time. However, finally, the derating in the Consumer sectors started (more in discretionary than staples), as the market recognised that credit growth was fuelling consumption directly or indirectly.

Chart 25: China - Credit, Consumption and Valuations



Source: CEIC, Datastream, UBS estimates

While we understand the appeal of the Asian consumer theme, we are particularly nervous about what valuations are telling us the market is implying about future growth.

This growth in our view is being in part fuelled by the credit cycle. And while, as we've said, this can continue for some time before becoming unsustainable, we need to recognise that the rate of credit growth could easily start to stumble as interest rates go up. We are, again, most likely at the trough of the rate cycle right now.

Moreover, as long-dated rates start to creep up, theoretically there should be less valuation support for long-duration growth sectors. In our view expensive consumer stocks are vulnerable both to a drop in actual growth rates as consumption shows its true colours – that of a derivative of interest rate sensitive credit growth – and secondly to higher discount rates.

In Appendix 3 we show the change in implied growth rates for various consumer stocks, using both our "Reality Check" framework for companies that UBS follows, and using a standard Gordon Growth Model, for other stocks in Asia. The full list and methodology is in Appendix 3 on pages 53-58.

Sector implication – be wary of confusing underlying demographic growth driver with the turbo-charging effect of credit on consumption. The consumer sectors have performed very well on the back of the credit cycle. But as rates trough and start to rise, growth is likely to slow, and discount rates rise. We are wary of expensive consumer valuations, especially in south east Asia.

Overall Sector conclusions

All three sectors have performed well, but the key issue to start thinking about is what happens when we move farther into the credit cycle and especially into a period of rising rates.

Generally we expect this to be a bigger problem for property than banks. Our concern on consumer stocks is that implied growth rates have shot up since 2009 especially in the ASEAN. We think the market is not recognising that credit has played a substantial role in growth here – it is not all demographics and productivity miracles. We see limited value in many consumer sectors here (especially Thailand, Indonesia and the Philippines).

Physical property prices have moved substantially and could go further. But these look vulnerable to any rate hikes (especially in the Philippines and Hong Kong). We are currently at the trough of the cycle, and property stocks to us therefore face the challenge of rising rates. Against this valuations look okay in Hong Kong, but richer in most ASEAN markets. We see a fundamental headwind, but some pockets of valuation support like Hong Kong and China.

We like those banks that could actually benefit from slightly steeper yield curves and rising rates (HK and Indonesian banks). We also in theory structurally like those banks that can extend loan growth, though we note that those that can are generally very expensive and valuations leave little upside in our view (the Philippines). Longer term, we need to recognise that the more banks grow profits through asset growth rather than margins, the more we should expect to see diminishing marginal returns in terms of share price gains. The path is clear

that as credit expands ever more rapidly, banks de-rate in anticipation of a future NPL problem. Nevertheless, in the short term, some banks look somewhat shielded from any rise in rates and most (largely with the exception of China) have not seen credit expand sufficiently yet to lead to too much of an imminent valuation headwind.

For consumer stocks, we are nervous about the degree to which the market has increased implied growth rates substantially, especially in ASEAN. We think the market is neglecting to recognise that credit is playing a key role in growth, and as it does, the valuation of some stocks should reflect this, just as it did in China. This is a longer-term challenge. Interest rate sensitivity will be an issue here, but short-dated sensitivity is more of an issue for discretionary stocks. The broader issue of long-dated rates rising, could have wider implications for discount rates used from growth stocks, and by extension the consumer staples.

This leaves us with a preference for banks in the region now, given valuation and interest rate sensitivity.

Investment Conclusion

The credit cycle is advanced but it can go farther. Generally credit ratios are high and have risen considerably since 2009 and while we agree with Duncan Wooldridge that we are entering a more advanced stage of the credit cycle, we also believe that the cycle is not over.

The early part of the credit cycle appears complete as we become more advanced in this process vigilance is called for, especially given that rates have probably bottomed. From here, we need to be thinking about what a reversal of low rates might mean.

Taking this to asset markets, we thought this credit cycle would be very positive for property and consumption, and by extension equities in both these areas as well as the providers of credit – the banks. This has indeed been the case.

Looking ahead for equities, we see a number of issues.

1. In the very short term, as we noted in 2009, there is a risk of asset markets getting frothy in this environment. This has arguably already happened in certain areas – for example, Hong Kong property is up more than 100% from the bottom. Within equities, strong sustained price momentum is normally a pre-requisite for bubbles - right now, the biggest risk (this is a risk, not a base case) of this happening would appear to be in the Philippines and Thailand. Conditions (recovering growth globally, lowered risk premiums and easy monetary conditions) would seem to offer the greatest potential for this to happen in the next six months, if at all, during this cycle.

2. Longer term, as credit grows faster than GDP, we think this curtails relative performance versus the rest of the world. The evidence of Asia ex Japan in the mid 1990s, or the US and Europe in the 2000s, suggests that the market de-rates credit-fuelled growth over time. By contrast, Asia's best returns in 40 years came off a deleveraged economy with strong external growth drivers – the 2000s. Parts of this region might well have strong long-term growth drivers (demographics and capital deepening opportunities) as it had in the 1970s, 80s and 90s. But right now, growth is being turbocharged by bringing tomorrow's

consumption forward to today through credit. The market sees through this over time and de-rates valuations. If valuations don't re-rate, EPS growth is likely to become more critical for relative returns versus other parts of the world.

3. There has been a notable de-rating of China as the equity market has recognised that very high credit growth has fuelled economic growth. China is not alone in using credit to grow. Many of the region's 'darling' markets are in fact seeing their growth being fuelled by credit. Over time, this is likely to become more noticeable as external balances deteriorate and liquidity becomes less stable. China has already shown the path to de-rating that others are likely to tread. The short-term risk of bubbles aside, we would expect valuation compression in other fast credit growth markets, such as Thailand, Singapore and Indonesia longer term if credit continues to grow at current rates.

4. Investors with a longer-term perspective need to start thinking about what less loose monetary conditions mean for the Property, Banks and Consumer stocks, all of which have done so well from low rates. We think property stocks look challenging when this happens. On our sensitivity analysis, Hong Kong, the Philippines, Malaysia and Thailand all look most vulnerable on an affordability basis to a 200 basis point rate increase from a fundamental perspective. At least valuations reflect this in Hong Kong (less so elsewhere). Cap rates are also likely to rise for landlords. We think Singapore valuations are more vulnerable to this than in Hong Kong.

For banks, there is clear evidence from various cycles and regions that excessive loan growth leads to de-rating. This has already happened to Chinese banks (cyclically, valuations have bounced, but we would expect these to trend lower over time). While most other banking sectors appear to be further behind the Chinese banking sector in terms of asset growth, if growth persists, a de-rating awaits these stocks too. In the meantime, we think moving into a world of rising rates could help interest rate sensitive banks such as in Hong Kong. So far this cycle, revenue growth has been the key driver. We would expect over time that interest rate sensitivity will play a greater role.

Finally, consumer stocks. Since mid 2009 implied revenue growth rates have risen by 350 basis points. We think the market is failing to recognise that credit is playing a key role in growth – it's not all demographics and the rise of the middle class (these drivers are little changed from 10 years ago). As the market makes the link between credit growth and consumption we think very high consumer valuations, especially in the ASEAN are vulnerable to de-rating. This is a longer-term challenge. Furthermore, for longer-duration growth stocks (consumer staples) rising discount rates could also hurt valuations over time.

How it ends

While this credit cycle will come to an end like all others before it, it doesn't need to end as painfully as in 1997. For example, there isn't the same build up of foreign debt that there was at the time of the Asian financial crisis. More likely in our view, is that the region will see falling marginal gains from increases in debt and, growth will be more sensitive to rising interest costs. As rates gradually rise, growth might slow, and NPLs eventually pick-up.

While this is a more benign end to the credit cycle than the bust of 1997/8 or 2008 in the US and Europe, we need to recognise that credit enhanced growth can become a drag when the cost of money increases. Conditions over the next six months are likely to be as good as they get for the Asian credit and liquidity story. Party on for now, but be choosier who you dance with.

Appendix I – Why Asia was ripe for a credit cycle?

A framework for thinking about credit cycles

Credit cycles keep repeating themselves. One country or region's efforts to deal with the collapse of a credit fuelled expansion tends to lead to loose policy and rebuilding of savings. Generally, these find their way elsewhere to other parts of the world – where growth and liquidity combine to drive up activity and prices. This tends to persist until the rise in prices, resulting loss of competitiveness and associated lowered income combine with high debt levels rising rates (as the rest of the world has completed its deleveraging) to reverse the cycle. This is another way of saying that the world is constantly in a state of economic imbalance – both in competitiveness and credit.

The financial or credit cycle is quite distinct from the business cycle[4]. The latter ebbs and flows with greater frequency. However the leveraging up and down of economies (the credit or financial cycle) tends to take place over longer time horizons – accentuating the business cycle at the peak and trough.

Our colleague Duncan Wooldridge, UBS's Chief Economist in Asia, has set out a framework for thinking about this from a macro perspective – a three stage process where 1) the early stage is marked by lowish levels of debts that are gradually rising, but accompanied by reasonable income growth 2) rising debt levels to less comfortable levels, accompanied by a meaningful slowdown in growth and income, 3) higher still levels of debt, impaired income levels and rising real interest rates which give rise to a more severe downturn. As the credit cycle turns sour, there is usually a substantial period of balance sheet repair marked by very weak growth.

Having gone through the adverse effect of an especially aggressive credit cycle in the early to mid 1990s, Asia undertook a substantial balance sheet adjustment which was largely complete by 2003. More recently of course, a similar experience is occurring elsewhere in the world, with resulting super-loose monetary policy.

It seems unreasonable to assume that Asia will once again head to a repeat of 1997 again any time soon, given that 1) in the aftermath of the global financial crisis there has been a more general recognition by policy makers globally that measures to prevent the excessive build up of credit are warranted, and 2) memories of 1997/8 are still embedded in many policy makers thinking (and has been reflected in certain pre-emptive behaviour by monetary authorities).

[4] We note that since the collapse of Bretton Woods, there have been a number of credit cycles that have generally lasted half a generation in Europe and the US – 1974; the late 1980s/early 1990s; 2007. Of course there have been other mini-cycles and recessions along the way. But the majors have come around every 15-20 years. Partly this reflects 1) the amount of time it takes to deleverage from one crisis and the process of leveraging the other side of this, and 2) a necessary generational step whereby a new generation of economic actors, untainted by the pain of a debt bust are willing to 'gear up' oblivious to the pain of a bust.

Indeed, in a recent report from the Bank of International Settlements (working paper no. 395 BLHA), the author suggests that the average length of a financial cycle is about 16 years dating back to the 1960s, around twice the length of the traditional business cycle.

Nevertheless Asia has been embarking on a credit cycle, with attendant benefits and rising risks, as we will shortly show.

Beyond the macro, the credit cycle also has important implications for asset prices. Firstly of course, rising credit tends to turbo charge growth for a period of time. But this is illusory and cyclical, not structural. Secondly, the low real interest rates associated with the earlier stage of a credit cycle often encourage cash to flow to real assets – partly because of the apparently high rates of growth, but also as inflation starts to erode the real value of cash. And thirdly, the potential misallocation of capital.

In Asia we've thought this would all be very positive for asset prices as we described in our report "*Why we still like the Asian liquidity story*" dated 25th June 2009. We expected cash to flow into real assets both taking advantage of low rates, but increasingly as cash crowded into momentum assets. We also thought it possible in this environment of cheap and abundant liquidity and credit enhanced growth that some assets become bubbly.

Why now? Asia was ripe for a credit cycle

After experiencing a painful deleveraging between 1997 and 2003, Asia ex Japan in general found itself in early 2003 with a) repaired balance sheets – at the corporate, household and bank level and b) with strong export competitiveness, thanks to the nominal exchange rate adjustments post 1997. 2003 marked the bottom of the credit cycle.

Prior to the Global Financial Crisis, leverage had been rising, credit growth was recovering, and Asian domestic growth was strong. The combination of strong export growth and a moderate credit cycle was helping growth, though by 2007, trade surpluses had already peaked.

Chart 26: Asia ex Japan – Trade Surpluses as % of GDP

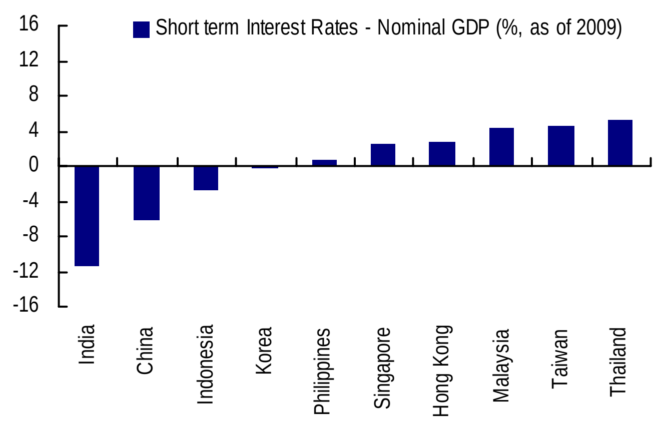
Source: CEIC

In one sense the Global Financial Crisis interrupted the Asian growth story, as the export engine took a hit both cyclically in the recession, but subsequently in terms of slower growth compared to rates achieved in the mid 2000s.

On the other hand, this has just fuelled the other part of the story – the credit cycle. The resulting sharp cut in interest rates and abnormally loose monetary policy from central banks in most major economies in response to their own financial crisis, combined with the ingredients in Asia to fuel a more rapid credit expansion in this part of the world.

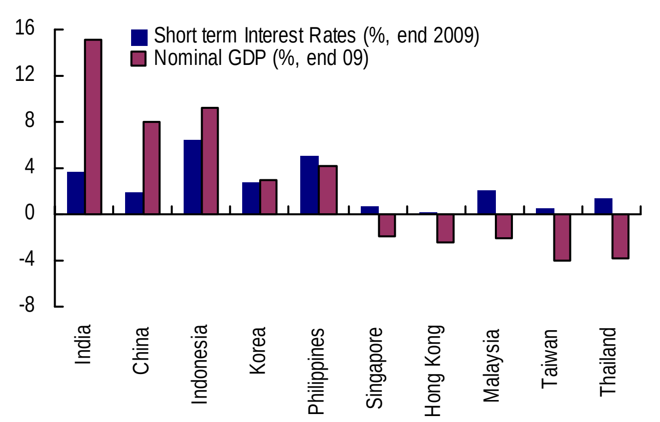
Asia's preference for quasi or actual pegging of their FX to the US dollar and abnormal monetary policy in the rest of the world in response to the Global Financial Crisis meant that we were importing very low interest rates to Asia. This was interacting with high rates of nominal GDP growth creating substantially negative real interest rates (Chart 27).

Chart 27: Real interest rates (%, as of 2009)



Source: Bloomberg, CEIC

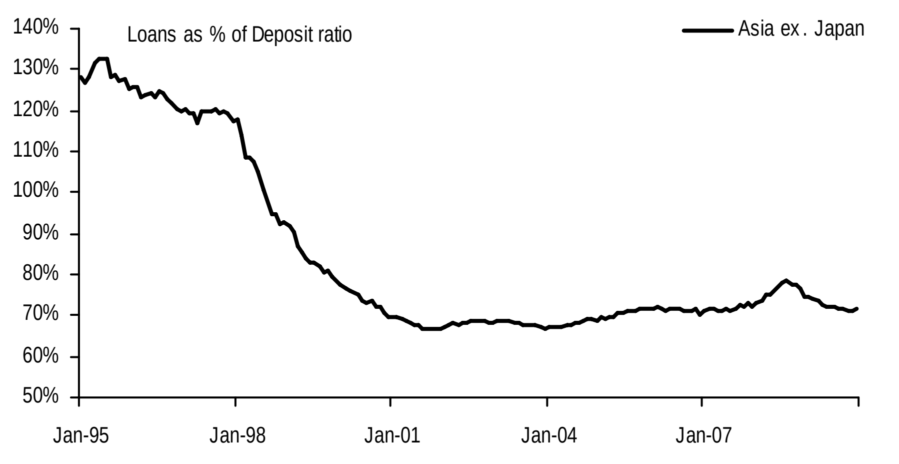
Chart 28: Short term interest rates and Nominal GDP (%, as of 2009)



Source: Bloomberg, CEIC

At the same time, Asian balance sheets were – for the large part – de-geared after several years of deleveraging post the Asian Financial Crisis 12 years earlier (Chart 29). Moreover, low interest rates in a number of economies and low loan/deposit ratios created strong incentives for banks to lend given the compression they faced in net interest margins.

Chart 29: Asia ex Japan - Loan to Deposit Ratio (1995-2009)



Source: CEIC, UBS estimates

We believed that authorities in Asia would be more focused on growth than inflation as they tried to support export sectors. This would allow them to keep currency pegs in place and continue to import global monetary policy until such time as inflation got out of control.

Finally, turbo-charging these themes, we expected global capital flows to chase higher growth parts of the world such as Asia as the US and Europe experienced multi year deleveraging and weak growth. We expected a shift in FDI as companies focused more on the Asian domestic demand story rather than outsourcing to re-export back into weak (in terms of demand) developed markets.

The consequence of high relative growth, strong capital flows, negative real interest rates, banks with abundant liquidity and an incentive to lend and domestic balance sheets with an incentive and capacity to borrow we thought would drive a substantial credit cycle.

This in turn we expected to be relatively inflationary and good for domestic demand. We also expected this to be less positive for the export sector as relative inflation rates to the rest of the world helped to “rebalance” global trade imbalances through real exchange rate appreciation.

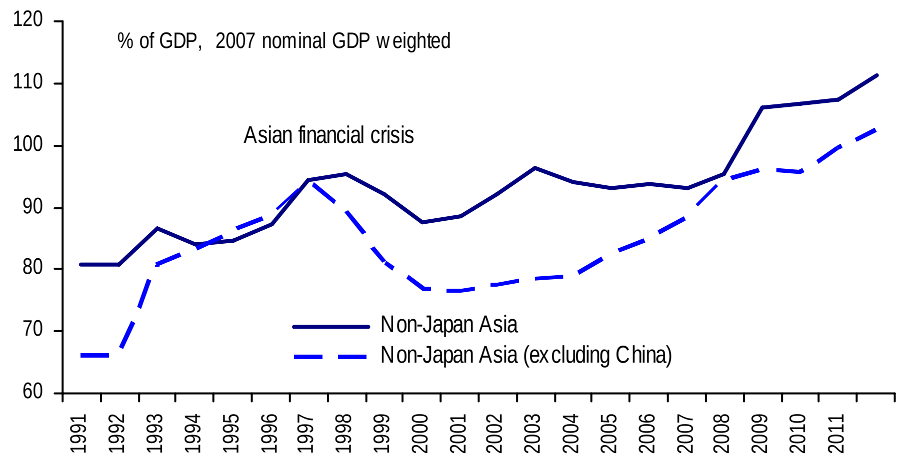
Although we saw this as a regional theme, we expected that Taiwan and Korea which already had high-ish levels of leverage would not participate in this process to the same degree as the rest of the region.

Appendix II - The evidence so far

Three years on, and we are a long way into the Asian credit cycle. As our colleague Duncan Wooldridge wrote in May last year – *The Great Asian Monetary Theme* (published May 31 2012) – we are transitioning regionally (with some notable country exceptions) to a more mature phase of the credit creation process. This is a view we very much share.

We are now four years into the credit cycle since the Global Financial Crisis. Credit to GDP has risen substantially in most countries, as Chart 30 shows.

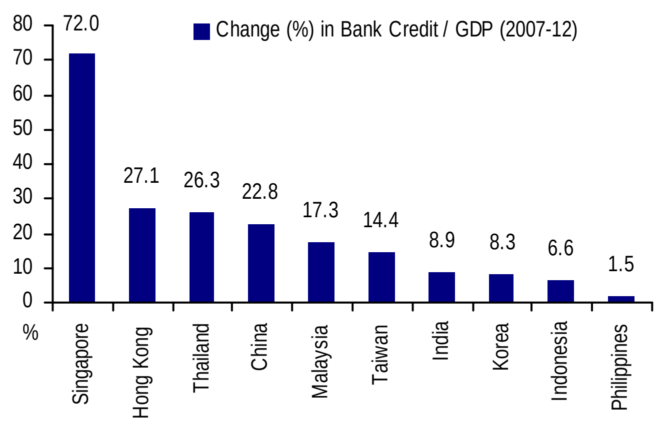
Chart 30: Credit to GDP Ratio for Asia ex Japan



Source: CEIC, UBS estimates

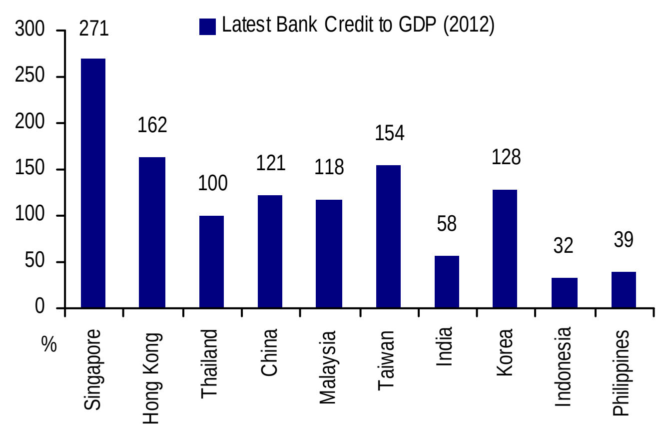
Much of this reflects the dramatic credit expansion in China, the largest economy in the region. Nevertheless, there has been a substantial pick up in credit across the region. In nominal terms, as chart 31 shows, credit growth has been strongest in Singapore, HK, Thailand and China as a share of GDP. It has also been the weakest in Korea among the bigger markets as we thought it would be.

Chart 31: Change in Bank Credit to GDP (%, 2007-12)



Source: CEIC, UBS estimates

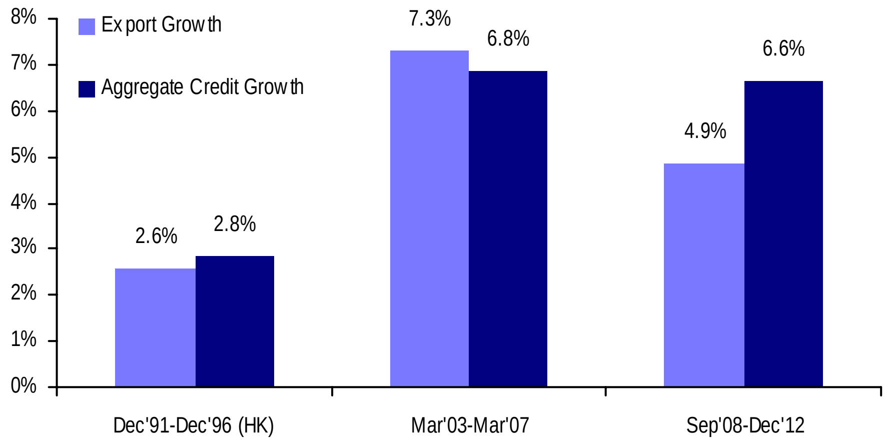
Chart 32: Latest Bank Credit to GDP (%, 2012)



Source: CEIC, UBS estimates

At an aggregate level, credit has materially exceeded GDP growth in this cycle, and has outpaced export growth. This is quite distinct say from the mid 2000s, when export growth was outpacing credit growth. It shares greater similarities with the early 1990s leverage cycle.

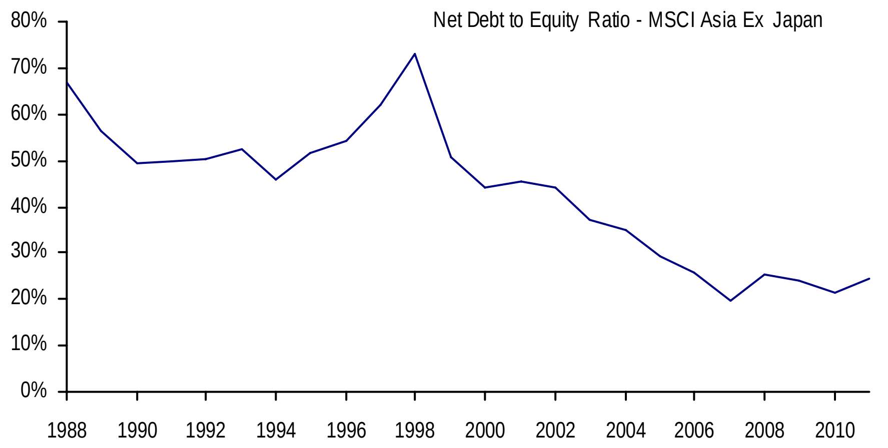
Chart 33: Export and Credit Growth – Asia ex Japan



Source: Datastream, UBS estimates

As Chart 34 shows, the aggregate corporate gearing level of the region is still subdued (there are country variances in the level of debt but they tend to show the same trend since 2009 as the chart shows – very little re-gearing by the corporate sector).

Chart 34: MSCI Asia ex Japan - Net Debt to Equity Ratio

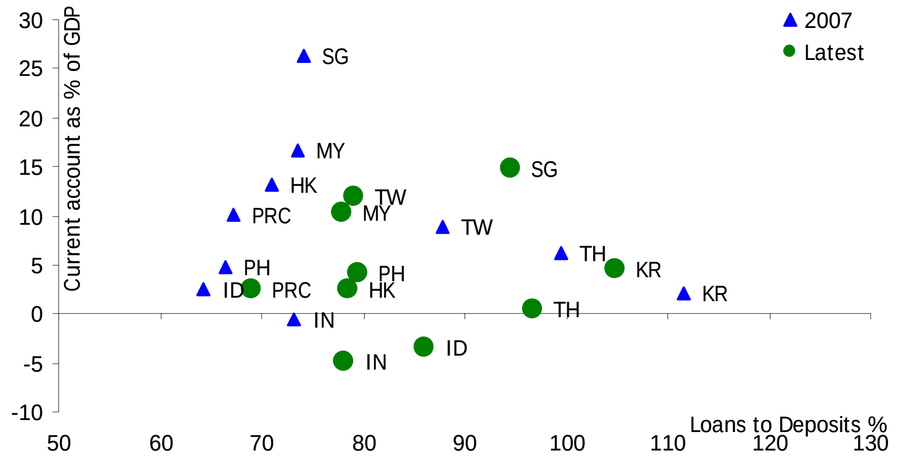


Source: Datastream, UBS estimates

By definition therefore, most of the credit creation has occurred so far in the household and government (in China's case) sectors.

The increase in credit (at a faster pace than export growth) is occurring with moderate deterioration in the region's current account surpluses, something that we think will likely persist as we go further into the credit cycle. Chart 35 from Duncan shows that we are someway into the process albeit we remain comfortably healthier today than in 1997.

Chart 35: Current Account and Loan to Deposit ratio

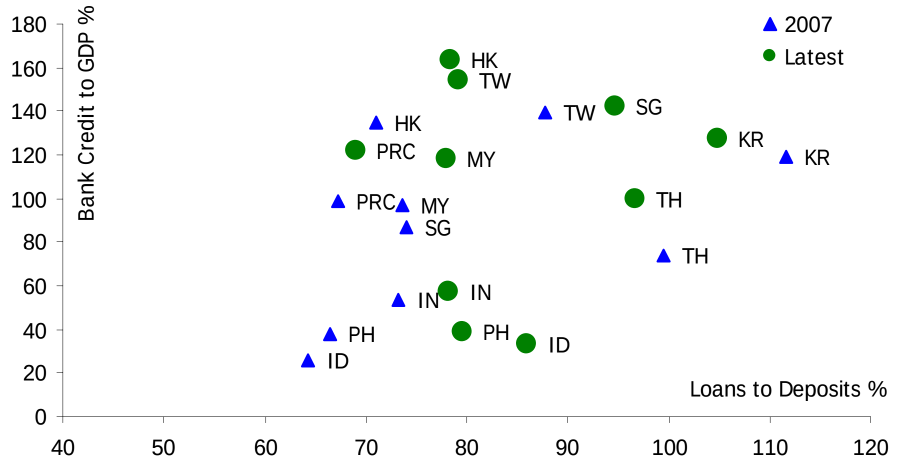


Source: CEIC

There has been a sizeable deterioration since 2007. However, we remain well below the sorts of warning levels of the extremes in 1997. In other words, while the growth in both credit and deterioration in domestic balances has continued, the process has not yet reached more extreme levels.

Likewise, liquidity ratios in the banking system are also deteriorating, though they have not reached extreme levels.

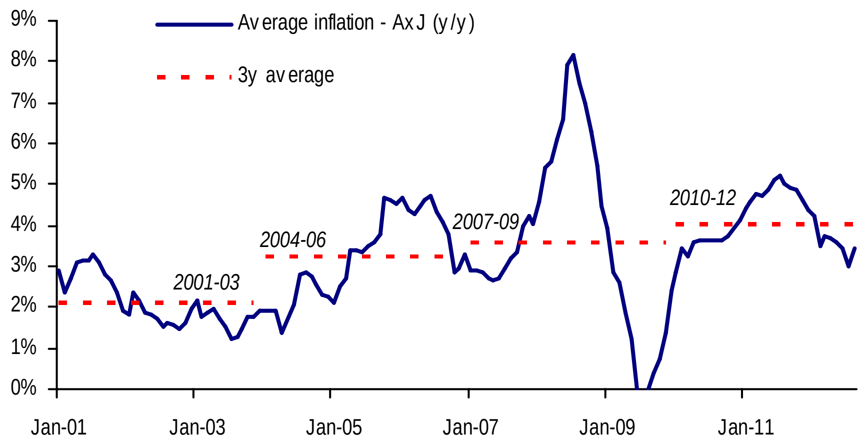
Chart 36: Bank Credit and Loan to Deposit ratio



Source: CEIC

A feature of the credit cycle is that we believe inflationary pressures remain strong structurally. Although for now inflation in Asia ex Japan is subdued cyclically, and this has allowed central banks to ease policy in 2012, we think the inflationary pressures do not remain far beneath the surface given the monetary environment we are in Asia.

Chart 37: Asia ex Japan – average inflation



Source: CEIC

On a trend basis, inflation has been ticking up. Not all of this is due to monetary factors – rising commodity prices and negative supply side labour policies are not helping. But loose money in this environment is not helpful.

In the very short term, we expect inflation to remain subdued for cyclical reasons. However, as we highlighted in our Outlook 2013, by the year end, we are expecting inflation to be rearing its head again.

This has important implications for what kills the credit cycle, a feature we return to later.

...and the policy response

When we first starting writing about this theme in 2009 many central bank and regulatory contacts were sceptical about a serious credit cycle getting going, particularly in the aftermath of the global financial crisis.

However, it has. In turn, the build up of credit and attendant fears for asset prices inflation (and busts the other side) have been met with a variety of 'cooling measures'.

Mostly, these have taken the form of macro-prudential measures, such as restrictions on leverage in house loans. For the most part, interest rate policy has not been aggressively utilised (partly because of the threat of sucking in further capital).

Hong Kong, Singapore and China have been the most aggressive in imposing administrative restrictions on property gains. Indonesia recently reduced loan/value limits for mortgages. Most other SE Asian economies have yet to conduct similar measures.

On the interest rate front, the undesirable consequence of attracting capital flows and putting upward pressure on either base money or the exchange rate, have probably turned central banks away from using interest rates as a principal tool to dampen the credit cycle. Ultimately, as we discussed earlier, this preference is likely to change as inflationary pressures pick back up cyclically.

How the theme has played out for asset prices

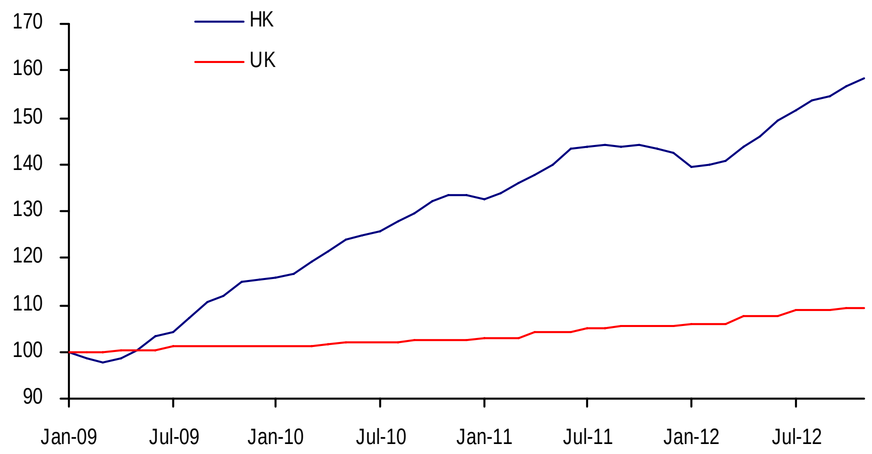
When we first started writing about the credit cycle theme in early 2009, we thought it would play out very positively for asset prices in Asia ex Japan. We foresaw a three-stage process as the credit cycle took off as far as asset prices were concerned.

The first stage was an 'arbitrage' phase where investors were able to arbitrage high yields on assets and low funding costs. The second stage was one in which strong growth and low interest rates interacted to drive up asset prices as investors borrowed to fund capital appreciation. This is a period where asset prices tend to outstrip income growth, with leverage going up.

Negative real interests are not unique to Asia. Most savers around the world are facing an effective tax on their cash holdings, through inflation. But unlike the deleveraging world which is experiencing deflationary pressure, the releveraging part of the world is reflating, creating additional needs for savers to protect their savings from inflation.

For example, as Chart 38 shows, rental costs in Hong Kong have risen 60% since early 2009, compared to less than 10% in the UK. The inflation tax in a reflating part of the world creates additional incentives for savers to protect their cash from inflation (this is one of the reasons we have been continuously positive on high-yielding stocks, for example).

Chart 38: Home Rental Index – HK vs UK (Mar'09 – Jun'12)



Source: CEIC

With rising inflation and negative real interest rates, and positive returns on assets, we also saw a risk that investors start extrapolating past returns into the future, and with it, the risk of bubbles forming in individual assets.

Because at its heart, this is about rising income and inflation expectations, we have always saw this as more of a 'real asset' story. We therefore thought that both property and equities would perform well.

Property – good gains so far.....

So far, this appears to have played out reasonably aggressively in property prices in many countries – particularly those where there has been a strong pool

of savings, and with rising inflation and low real interest rates there has been the greatest incentive to hide in real assets. Table 11 shows the gains on residential property since late 2008.

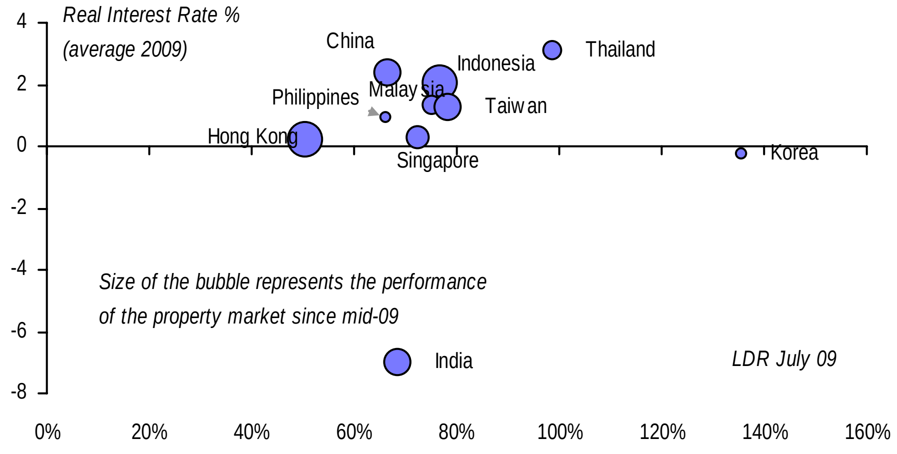
Table 11:Residential property price gains since late 2008

	Property Prices
Indonesia	90%*
Hong Kong	94%
India	55%
Taiwan	53%
China	52%
Singapore	48%
Thailand	32%
Malaysia	30%
Philippines	14%
Korea	12%

Source: CEIC, Datastream; * - Jakarta Central Business District only

Getting hold of good quality price data is difficult in Asia. Where we have good data – especially in Hong Kong, China and Singapore – we see that property has risen very strongly. Only in the Philippines and Korea have prices been more subdued. While in Korea, the already high level of leverage in system always made it a long shot in our view to participate in the credit cycle, it is a surprise to see the Philippines lag especially given falling rates there. In Indonesia, property prices have also apparently lagged. However, we believe the official central bank data significantly understates real prices rises. And anecdotal evidence that industrial land prices for example rose almost 100% last year in Jakarta, or volume growth from developers, would suggest much stronger gains in property than the official data.

Chart 39: Loan to Deposit ratio, Real Interest Rates and Property market performance since mid-09

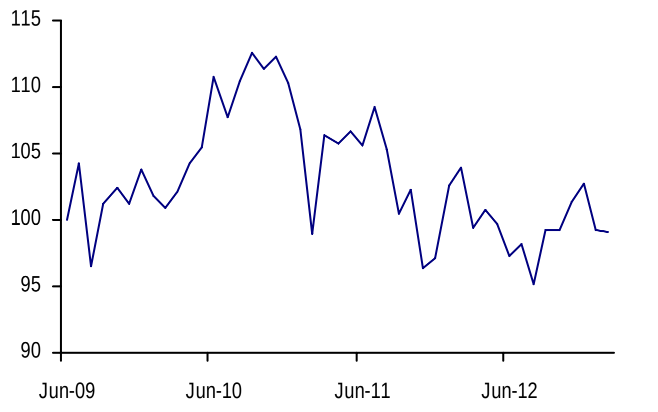


Source: CEIC, Bloomberg

Equities – more apparent in sectors than the market

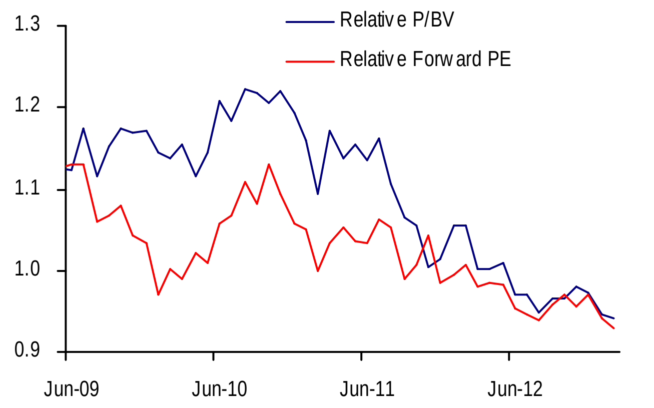
Equities in Asia have risen by around 140% since mid 2009. Relative to markets elsewhere in the world, the Asia ex Japan markets have not performed particularly strongly from mid 2009. Indeed, they have actually de-rated since then relative to the rest of the world.

Chart 40: Relative Performance – AxJ vs. World



Source: Datastream

Chart 41: Relative Valuations – AxJ vs. World



Source: Datastream

For sure, this partly reflects non-credit cycle sectors in the Asia ex Japan index. This theme is not about buying shipbuilders in Korea, or Tech stocks in Taiwan.

Within the equity market….

As we thought this debt cycle would be driven mainly by household credit creation, we thought this would be very positive for property related equities, and elsewhere within the equity market for domestic focused stocks (especially consumption proxies) and those fuelling the credit cycle, the banks.

At the time, we created a scorecard of countries based on their exposure to various factors – the degree to which they could sustain a credit cycle (our proxy was the LD ratio); the domesticity of the equity market; and the exposure of the market to financials (both property and banks) and consumer stocks (see Table 12). We thought neither Korea nor Taiwan would really participate in this process – partly because their advanced credit penetration ratios made it hard to see where strong credit growth would come from. But secondly because their markets were largely export in nature, we thought this would be less positive as it was largely a domestic theme. We did however think that most other countries in the region could benefit in some way from this process.

Table 12: Ranking of countries on the Liquidity theme factors (based on values as of Jul'09)

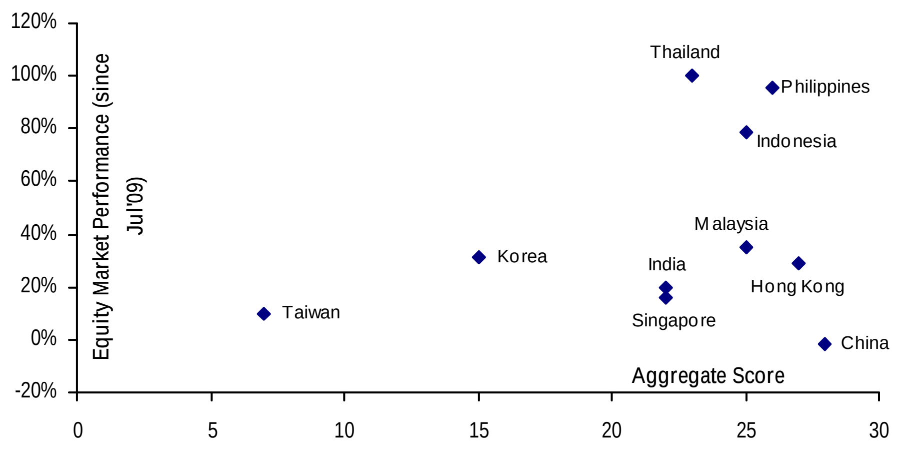
Score (high is better)	LDR Ratio (as of Jul'09)	Domestic contribution to revenues (as of Jul'09)	Banks + Property share of market (%)	Consumer share of market (%)	Aggregate Score	Final Rank	Equity Market Performance since Jul'09 (Local Currency)
China	8	8	7	5	28	1	-1.7%
Hong Kong	10	3	10	4	27	2	29.2%
India	7	6	3	6	22	7	19.7%
Indonesia	4	7	4	10	25	4	78.7%
Korea	1	4	2	8	15	9	31.6%
Malaysia	5	5	6	9	25	4	35.2%
Philippines	9	9	5	3	26	3	95.1%
Singapore	6	1	8	7	22	7	16.3%
Taiwan	3	2	1	1	7	10	9.7%
Thailand	2	10	9	2	23	6	100.0%

Source: CEIC, DataStream, UBS estimates

Unfortunately for us, one of the countries that we expected to benefit – China – has almost too much of a good thing. The degree of the credit expansion was so extreme that very quickly the market started to fret about the degree to which the credit expansion would run into problems (at best inflation, at worst some sort of credit bust). Chart 42 shows the performance of the various countries compared to their aggregate scores on the model.

On a brighter note, the ASEAN markets, which we also thought would do well on the back of this theme have indeed performed well.

Chart 42: Aggregate score on our framework versus actual equity market performance



Source: CEIC, Datastream, UBS estimates

Turning to this in more detail, we examine exactly what has happened to the three groups (by country) that we expected to benefit within the equity market – property, banks and consumer stocks.

1. Property

While physical property prices have risen sharply, this has not happened to the same degree in the equity market. Chart 43 shows the relative performance of the MSCI Asia ex Japan property sector versus the broader market. Despite the good rise in underlying physical values, performance for the listed sector has not been so strong.

For more detail, Table 13 shows the performance of each country property market, along with the book value increase for each country index, the corresponding price performance of the index and the resulting re or de-rating of that property sector.

By and large, book values have kept pace with the change in residential property prices. There are exceptions – for example, book values have soared in The Philippines relative to prices, reflecting volumes (and possibly questionable price data).

Property stocks have not materially outperformed the market as Chart 43 shows. This is disappointing to us as it was one of the sectors, along with physical property itself, that we expected to do well from the credit expansion theme.

2. Banks

The second sector to take a look at is the banks. This sector is of course fundamental to the ability of the credit cycle to function. It was another sector that we expected to do well as the re-leveraging of Asia took place.

As we showed earlier, bank credit growth has been rapid since 2009. This much we got right. The sector has outperformed the index moderately. But the outperformance has been limited. As with the property stocks, it too has de-rated despite its very moderate outperformance.

It also seems clear that bank sectors that have gone through aggressive build up of assets have struggled to perform as the market focuses more on balance sheet risks as well of course at the prospect that revenue drivers become less robust.

Since mid-09, the derating is more acute in China, but banks in most of the smaller markets have re-rated including Indonesia (6.1%), Malaysia (5.1%), Taiwan (0.7%) and more aggressively in The Philippines (44.2%) and Thailand (72.5%).

So although the sector has in aggregate performed in line with the market overall, it has like the property stocks de-rated. Clearly the equity market remains uncomfortable about the ultimate provider of this capital.

3. Consumer Stocks

The third beneficiary of the credit cycle that we identified was the consumer related sectors - Consumer Staples and Consumer Discretionary. We thought that the higher domestic growth associated with this theme, compared to export growth, would lift the domestic consumer stocks.

Charts 47 and 49 show the equally weighted[5] performance indices for the consumer sectors. We also show the overall index (market cap weighted) but this does not capture the real story in that sector, where a handful of stocks, most notably KT&G (which, as a Korean stock, we did not think would perform to this theme) have constrained the overall returns.

The overall performance is of course a mixed bag. Performance varies widely both across countries and individual sub sectors within the consumer sectors. Once again to look at this we have constructed average performance indices for each subsector in each country. Table 15 shows the average performance of stocks in each consumer sub sector across the region since Jan 2009.

What is apparent is that 1) revenue growth for the listed sector has for the large part outstripped nominal consumption growth with the exception of Korea – one of two countries, along with Taiwan, that we thought would struggle to get a domestic credit cycle going. While in the case of Taiwan, many of the companies have taken advantage of Chinese demand, either through their mainland businesses or through tourism, it intrigues us that in all the other countries where the credit cycle has been strong, so too, revenue growth has been a multiple of consumption growth. 2) Unlike both the property and banks sectors, the consumer sectors have mostly seen re-ratings (the major exception being China).

Consumer stocks in the ASEAN markets (except Malaysia) have outperformed their peers across the region. The strong performance in these markets has been spread across all sub sectors, particularly Autos and Retailing in Consumer Discretionary, and Food, Beverage & Tobacco in Consumer Staples.

The performance of Consumer stocks in the rest of the region has been less spectacular than the ASEAN markets. The performance of Consumer Staples in China and HK has been weak - partly more recently as investors have lost faith in the ‘rebalancing’ theme (which we never bought into).

Table 15 shows the current valuations (price-to-book) relative to the average for last five years for the consumer sub sectors across the region. Given the strong performance over the last few years, Consumer Discretionary stocks in Indonesia and Thailand look on the expensive side, in the Philippines less so. Consumer stocks in Korea and Taiwan trade around average valuations. Their counterparts in China, India, HK, Singapore and Malaysia trade at much lower relative multiples and look relatively inexpensive on this basis.

While the market has been reluctant to pay up for property stocks, and has been mostly in de-rating mood as far as the banks are concerned in Asia (especially China), the market has been generally most excited about the consumer theme.

[5] We have constructed equally weighted indices using the broad universe for MSCI Asia ex Japan. This index has around 540 stocks across the two consumer sectors.

Chart 43: Relative Performance of MSCI Asia Ex Japan Real Estate Sector versus broader market

Chart 44: Relative Valuation of MSCI Asia Ex Japan Real Estate Sector versus broader market

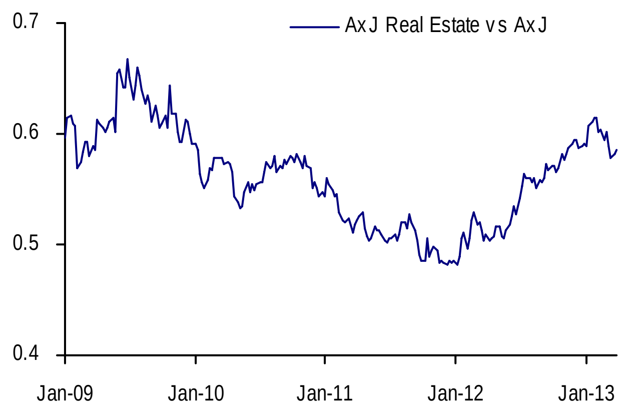


Chart 45: Banks – Relative Performance vs MSCI Asia ex Japan

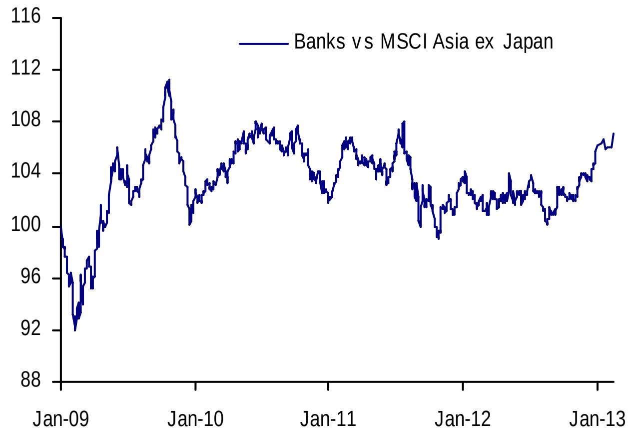


Chart 46: Banks – Relative P/BV vs MSCI Asia ex Japan

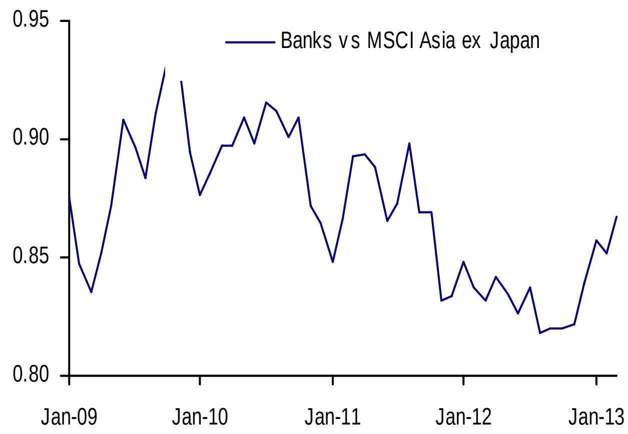


Chart 47: Relative Performance – equally weighted index

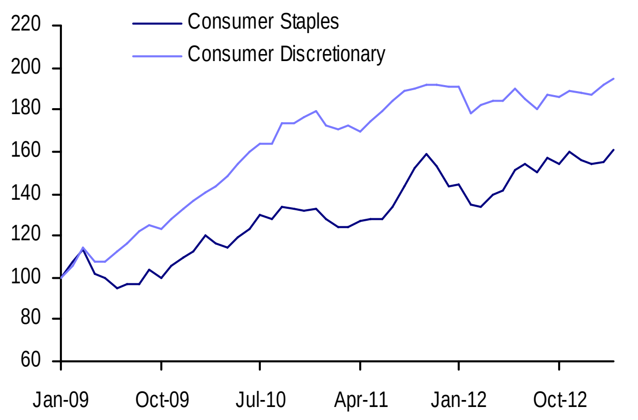
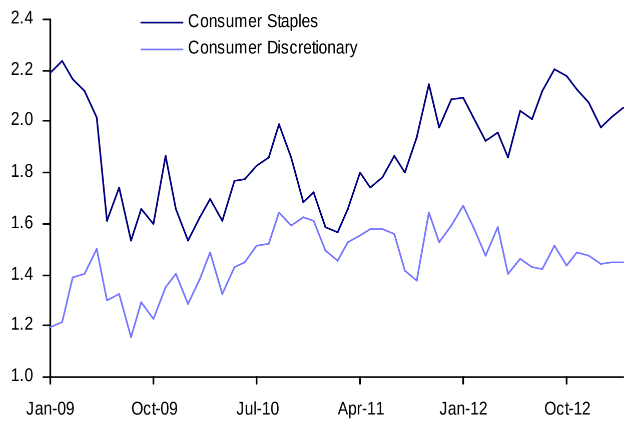


Chart 48: Relative Valuation – equally weighted index



Source: Datastream

Chart 49: Relative Performance – MSCI (market cap weighted) index

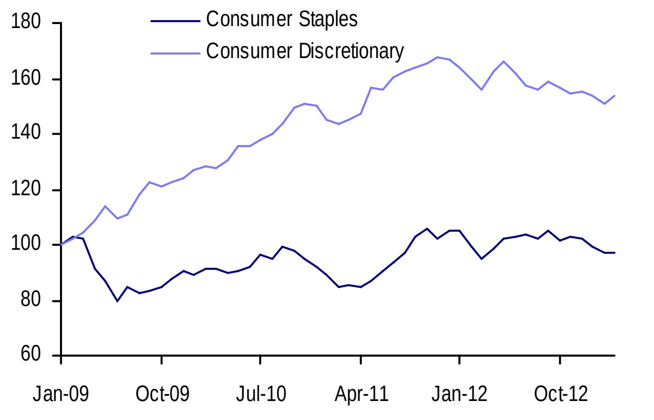
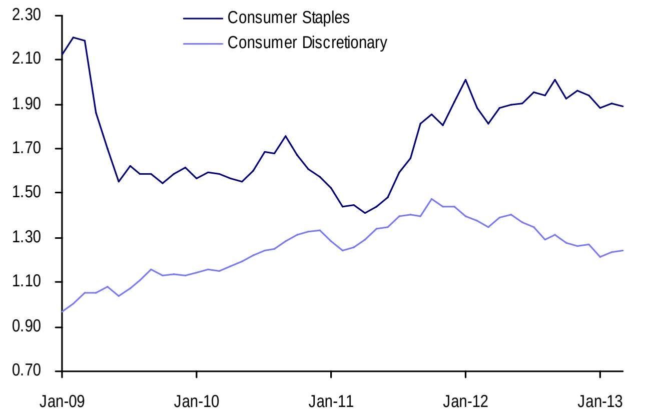


Chart 50: Relative Valuation – MSCI (market cap weighted) index



Source: Datastream

Table 13:Change in Property Prices, Equity book value, and Equity prices for the property sectors since Jul'09 – (end 2008 for physical property prices)

Property	Property Prices (%)	Book Value (MSCI Index, until Dec end)	Price in local currency (MSCI Index)	Rerating/Derating (P/B)
China	52.3%	66.7%	-7.4%	-44.4%
HK	94.0%	59.5%	20.0%	-24.8%
India*	54.5%	28.2%	-65.4%	-73.0%
Indonesia	90.0%			
Korea	10.7%			
Malaysia	29.7%	-62.1%	26.7%	41.3%
Philippines	14.1%	548.7%	198.1%	-54.0%
Singapore	47.9%	-14.6%	38.6%	62.4%
Taiwan	52.8%	22.4%	-11.5%	-27.7%
Thailand**	31.9%			

Source: CEIC, Datastream, UBS; * - India property prices since Mar'10

Table 14:Growth in Loans, Equity book value and change in Equity prices for the Banking sectors since 2008 end

Banks	Asset Growth (%)	Book Value (MSCI Index, until Dec end)	Price in local currency (MSCI Index)	Rerating/Derating
China	107.6%	112%	81.2%	-14.6%
HK	64.9%	42%	96.1%	37.7%
India	89.9%	62%	183.8%	75.6%
Indonesia	96.7%	152%	260.2%	43.0%
Korea	19.6%	37%	37.7%	0.6%
Malaysia	49.8%	53%	111.2%	38.4%
Philippines	49.5%	85%	237.2%	82.4%
Singapore	52.8%	32%	70.6%	29.7%
Taiwan	15.6%	20%	83.5%	53.3%
Thailand	37.8%	35%	261.5%	167.4%

Source: Datastream, UBS estimates

Table 15:Change in Nominal Consumption, Revenue Growth, Equity book value, and Equity prices for the Consumer sectors since Jul'09

Consumer (Avg Disc. + Staples)	Nominal Consumption Growth (%)	Revenue Growth* (2009-2012e Cumulative)	Book Value (MSCI Index, until Dec 2012 end)	Price (MSCI Index)	Rerating/Derating
China	46.1%	76.6%	24.0%	17.5%	-5.5%
HK	26.2%	106.3%			
India	60.9%	90.5%	143.0%	105.7%	0.5%
Indonesia	35.3%	68.3%	158.7%	132.0%	13.4%
Korea	20.6%	0.1%	93.0%	65.6%	-12.5%
Malaysia	30.8%	60.4%	-8.3%	27.6%	-9.4%
Philippines	41.5%	61.9%	-0.1%	121.3%	172.8%
Singapore	29.1%	12.3%	28.3%	11.5%	-25.6%
Taiwan	19.8%	46.3%	19.8%	73.5%	46.8%
Thailand	23.7%	68.6%	94.5%	301.8%	134.2%

Source: CEIC, Datastream, UBS estimates; * - excludes Kia Motors and Hyundai Motors, ** - excludes Genting Singapore

Appendix III – Consumer stocks

In this section, we show the implied differential in growth rates for the Consumer stocks from across the region. We have used different approaches for this calculation for UBS covered stocks (~80) and the non-covered UBS stocks (~100).

For the UBS covered stocks, we use our Reality Check framework to calculate the implied growth rates in July 2009 (post the normalisation in valuations) and today. We look at the differential of these two rates to get a sense of how the expectations of the market from these stocks have evolved over the last few years. In short, the growth rate is an implied rate using a three stage growth model which assumes that the ROE remains constant for the first 10 years and then it fades down to the cost of capital over the next 5 years. At year 15 we assume that the ROE spread over the cost of capital has faded and the stock is trading at its fair value. Beyond this point, the stock grows at a constant long term growth rate equal to the 10 year sovereign bond yield (Table 16)

Please refer to our note *'Reality Check – Franchises, Going Concerns and Projects'* dated 29th June 2012 for details of the Reality Check framework.

For the non-UBS covered stocks, we use a much less sophisticated model. We use the difference between the 12 month forward earnings yields today versus July 2009 as an indication of how much the expected growth rate has changed by for each stock. The assumptions in using this Gordon growth model based approach are that the cost of capital and payout remain same across the two periods (Table 17).

Table 16: Implied growth rates for UBS covered stocks

Stock	Country	Sector	Rating	Price target upside (%)	Market Cap (US$, Mn)	Implied Growth July'09	Latest	Latest – Jul'09
Want Want China Holdings	CN	Consumer Staples	Sell	-9.9%	17.01	28%	31%	3%
Uni-President China Holdings	CN	Consumer Staples	Sell	-15.8%	4.28	20%	27%	7%
Belle International Holdings	CN	Consumer Discretionary	Sell (CBE)	-9.9%	15.77	18%	25%	7%
Hengan International Group	CN	Consumer Staples	Neutral	0.5%	11.72	27%	24%	-3%
Tingyi Cayman Islands	CN	Consumer Staples	Buy	11.2%	16.96	24%	24%	0%
China Foods	CN	Consumer Staples	Sell	-5.7%	3.11	22%	18%	-4%
Tsingtao Brewery	CN	Consumer Staples	Neutral	3.0%	7.44	33%	14%	-19%
Giordano	CN	Consumer Discretionary	Neutral	-1.8%	1.24	-52%	13%	65%
Golden Eagle Retail	CN	Consumer Discretionary	Sell (CBE)	-20.0%	3.62	21%	12%	-10%
Parkson Retail	CN	Consumer Discretionary	Sell (CBE)	-10.9%	2.41	29%	6%	-22%
Daphne International	CN	Consumer Discretionary	Sell	-26.2%	1.71	1%	5%	4%
Hengdeli Holdings	CN	Consumer Discretionary	Buy	23.7%	1.25	-4%	-3%	1%
Haier Electronics	CN	Consumer Discretionary	Neutral	1.6%	2.56	-44%	-9%	35%
Anta Sports Products	CN	Consumer Discretionary	Buy	32.4%	2.05	16%	-15%	-31%
Dongfeng Motor	CN	Consumer Discretionary	Sell	-25.0%	8.09	-7%	-26%	-19%
Ports Design	CN	Consumer Discretionary	Neutral	9.7%	8.09	22%	-57%	-79%
Gome Electrical Appliances	CN	Consumer Discretionary	Sell	-23.1%	1.87	14%	-70%	-84%
Galaxy Entertainment Group	HK	Consumer Discretionary	Buy	21.1%	13.84	-21%	33%	54%
Sa Sa International	HK	Consumer Discretionary	Neutral	10.0%	1.84	-1%	18%	19%
Li & Fung	HK	Consumer Discretionary	Sell (CBE)	-28.7%	12.57	21%	18%	-3%
Lifestyle International	HK	Consumer Discretionary	Buy	52.2%	3.49	4%	14%	10%
TVB	HK	Consumer Discretionary	Neutral	7.5%	3.30	-7%	6%	13%
Luk Fook Holdings	HK	Consumer Discretionary	Buy	40.6%	8.09	-50%	-4%	46%
Yue Yuen Industrial	HK	Consumer Discretionary	Neutral	-3.7%	5.63	-25%	-11%	13%
Esprit	HK	Consumer Discretionary	Neutral	12.0%	2.16	-10%	-20%	-9%
Ace Hardware Indonesia	ID	Consumer Discretionary	Neutral	-10.0%	8.09	8%	37%	29%
Media Nusantara Citra Tbk, PT	ID	Consumer Discretionary	Neutral	9.5%	3.91	-85%	36%	121%
Ramayana Lestari Sentosa	ID	Consumer Discretionary	Neutral	-1.8%	8.09	-8%	31%	39%
Unilever Indonesia	ID	Consumer Staples	Neutral	2.2%	20.74	25%	30%	5%
Surya Citra Media Tbk	ID	Consumer Discretionary	Buy	24.8%	8.09	-53%	29%	82%
Gudang Garam	ID	Consumer Staples	Buy	21.2%	10.03	13%	22%	10%
Astra International	ID	Consumer Discretionary	Neutral	9.7%	34.64	6%	15%	8%
Indofood S.M.	ID	Consumer Staples	Buy	10.0%	5.31	30%	7%	-23%
Astra Agro Lestari	ID	Consumer Staples	Neutral	9.8%	3.48	8%	5%	-3%
London Sumatra Indonesia	ID	Consumer Staples	Buy	80.1%	8.09	0%	4%	3%
Sampoerna Agro	ID	Consumer Staples	Buy	56.3%	8.09	-11%	-14%	-3%

Stock	Country	Sector	Rating	Price target upside (%)	Market Cap (US$, Mn)	Implied Growth July'09	Implied Growth Latest	Implied Growth Latest – Jul'09
Zydus Wellness	IN	Consumer Staples	Buy	39.6%	8.09	12%	53%	42%
Emami Ltd	IN	Consumer Staples	Buy	25.8%	1.47	42%	46%	4%
Godrej Consumer Products	IN	Consumer Staples	Neutral	-1.6%	4.33	17%	40%	23%
Marico Ltd	IN	Consumer Staples	Buy	21.1%	2.39	21%	40%	19%
Zee Entertainment Enterprises Ltd	IN	Consumer Discretionary	Sell	-4.1%	3.71	33%	38%	6%
Maruti Suzuki India	IN	Consumer Discretionary	Buy	40.1%	7.74	30%	37%	7%
ITC	IN	Consumer Staples	Buy	22.7%	41.32	19%	37%	18%
Titan Industries	IN	Consumer Discretionary	Neutral	8.4%	4.60	37%	36%	-1%
United Spirits Ltd	IN	Consumer Staples	Buy	28.3%	3.05	25%	36%	11%
Dabur India Ltd.	IN	Consumer Staples	Neutral	8.7%	4.45	31%	30%	-1%
TTK Prestige	IN	Consumer Discretionary	Neutral	21.9%	8.09	-12%	29%	41%
Bajaj Auto	IN	Consumer Discretionary	Buy	41.4%	9.77	50%	28%	-22%
Nestle India Ltd.	IN	Consumer Staples	Buy	27.3%	8.54	33%	22%	-11%
Hindustan Unilever	IN	Consumer Staples	Buy	14.6%	23.75	28%	21%	-7%
Exide Industries	IN	Consumer Discretionary	Buy	38.5%	2.49	23%	21%	-3%
Sun TV Network	IN	Consumer Discretionary	Buy	65.4%	2.69	25%	21%	-5%
Jagran Prakashan	IN	Consumer Discretionary	Buy	40.3%	8.09	34%	17%	-17%
Hero MotoCorp	IN	Consumer Discretionary	Buy	46.1%	6.97	30%	11%	-19%
Mahindra & Mahindra	IN	Consumer Discretionary	Buy	28.6%	9.48	-5%	10%	15%
Bajaj Electricals	IN	Consumer Discretionary	Buy	65.8%	8.09	-9%	4%	14%
Orion Corp.	KR	Consumer Staples	Buy	6.3%	8.09	5%	31%	26%
LG Household & Health Care	KR	Consumer Staples	Buy	22.0%	8.09	23%	26%	3%
Amorepacific	KR	Consumer Staples	Sell	-5.6%	8.09	11%	16%	5%
Kangwon Land	KR	Consumer Discretionary	Buy	28.2%	4.59	-16%	2%	19%
KT&G	KR	Consumer Staples	Neutral	6.8%	10.09	-4%	-5%	-1%
Hyundai Mobis	KR	Consumer Discretionary	Buy	22.4%	27.20	-6%	-14%	-9%
BAT (Malaysia)	MY	Consumer Staples	Neutral	-1.4%	5.75	10%	20%	10%
KL Kepong	MY	Consumer Staples	Buy	9.6%	7.49	13%	19%	6%
Genting	MY	Consumer Discretionary	Buy	9.8%	10.69	-2%	8%	9%
IOI Corporation	MY	Consumer Staples	Neutral	-1.6%	10.65	12%	7%	-5%
Genting Malaysia	MY	Consumer Discretionary	Buy	15.9%	7.05	-1%	-3%	-1%
Jollibee Foods Corp	PH	Consumer Discretionary	Sell	-31.9%	2.59	20%	21%	1%
Singapore Press	SG	Consumer Discretionary	Sell	-12.3%	5.21	4%	0%	-4%
Wilmar International Limited	SG	Consumer Staples	Neutral	4.8%	16.47	14%	-34%	-48%
Indofood Agri Resources	SG	Consumer Staples	Buy	50.6%	8.09	-5%	-51%	-46%
Minor International	TH	Consumer Discretionary	Buy	12.1%	2.02	4%	39%	36%
Robinson Department Store	TH	Consumer Discretionary	Sell	-26.1%	2.34	8%	35%	27%
Thai Union Frozen Products	TH	Consumer Staples	Buy	38.0%	2.85	-31%	16%	47%
Formosa International Hotels Corp	TW	Consumer Discretionary	Buy	26.3%	1.04	-17%	37%	54%

						Implied Growth		
Stock	Country	Sector	Rating	Price target upside (%)	Market Cap (US$, Mn)	July'09	Latest	Latest – Jul'09
President Chain Store	TW	Consumer Staples	Neutral	-6.9%	5.49	11%	26%	16%
Largan Precision	TW	Consumer Discretionary	Neutral	1.1%	2.87	11%	22%	11%
Giant Manufacturing	TW	Consumer Discretionary	Sell	-32.2%	2.06	-4%	11%	16%
Cheng Shin Rubber Ind	TW	Consumer Discretionary	Buy	13.6%	7.53	7%	6%	-1%

Source: UBS estimates

Table 17: Implied growth differential (latest versus July'09) for non-UBS covered stocks

Stock	Country	Sector	Implied Growth Difference (Latest – Jul'09)
Konka Group 'B'	CN	Consumer Discretionary	8.3%
Sunny Optical Tech.(Gp.)	CN	Consumer Discretionary	7.6%
Shenzhou Intl.Gp.Hdg.	CN	Consumer Discretionary	6.0%
China Yurun Food Group	CN	Consumer Staples	4.6%
Weiqiao Textile 'H'	CN	Consumer Discretionary	2.4%
Huangshan Tourism Dev. 'B'	CN	Consumer Discretionary	2.4%
Ajisen(China)Holdings	CN	Consumer Discretionary	2.3%
China Dongxiang (Group)	CN	Consumer Discretionary	1.4%
Bosideng Intl.Holdings	CN	Consumer Discretionary	1.0%
China Huiyuan Juice Gp.	CN	Consumer Staples	0.1%
Vinda International Hdg.	CN	Consumer Staples	0.0%
Minth Group	CN	Consumer Discretionary	-0.3%
China Res.Enterprise	CN	Consumer Discretionary	-0.8%
Wumart Stores 'H'	CN	Consumer Staples	-0.8%
China Agri-Inds.Hdg.	CN	Consumer Staples	-0.8%
China Mengniu Dairy	CN	Consumer Staples	-1.0%
Xinhua Wsh.Pbl.&Mda.Co. 'H'	CN	Consumer Discretionary	-1.1%
Rexlot Holdings	CN	Consumer Discretionary	-1.5%
Lianhua Sprmkt.Hdg.'H'	CN	Consumer Staples	-1.7%
Xtep International Hdg.	CN	Consumer Discretionary	-2.0%
Intime Dept.Store (Gp.)	CN	Consumer Discretionary	-2.0%
Avichina Ind.& Tech.'H'	CN	Consumer Discretionary	-2.5%
Great Wall Motor Co.'H'	CN	Consumer Discretionary	-2.6%
Qingling Motors 'H'	CN	Consumer Discretionary	-2.7%
Sinomedia Holding	CN	Consumer Discretionary	-3.0%
Lu Thai Tex.Joint Stk. 'B'	CN	Consumer Discretionary	-3.0%
Maoye International Hdg.	CN	Consumer Discretionary	-3.1%
China Trvl.Intl.Inv.Hk.	CN	Consumer Discretionary	-3.3%
Brilliance China Autv. Hdg.	CN	Consumer Discretionary	-3.6%
New Wld.Dept.Store China	CN	Consumer Discretionary	-4.6%
Skyworth Digital Hdg.	CN	Consumer Discretionary	-5.1%
Shanghai Jin Jiang Intl. Htls.Dev.'B'	CN	Consumer Discretionary	-8.3%
Tianneng Power Intl.	CN	Consumer Discretionary	-8.5%
Inner Mongolia Eerduosi Res.'B'	CN	Consumer Discretionary	-32.0%
Global Bio-Chem Tech.Gp.	CN	Consumer Staples	-56.5%
YGM Trading	HK	Consumer Discretionary	5.7%
Texwinca Holdings	HK	Consumer Discretionary	4.1%
Glorious Sun Enterprises	HK	Consumer Discretionary	4.0%
Chow Sang Sang Hdg.Intl.	HK	Consumer Discretionary	2.4%
Cafe De Coral Hdg.	HK	Consumer Discretionary	1.8%

Stock	Country	Sector	Implied Growth Difference (Latest – Jul'09)
Dickson Concepts (Intl.)	HK	Consumer Discretionary	1.7%
Stella Intl.Holdings	HK	Consumer Discretionary	1.3%
Pico Far East Holdings	HK	Consumer Discretionary	1.3%
Techtronic Inds.	HK	Consumer Discretionary	0.8%
First Pacific	HK	Consumer Staples	0.7%
Xinyi Glass Holdings	HK	Consumer Discretionary	0.3%
Pacific Textiles Hdg.	HK	Consumer Discretionary	0.2%
Shangri-La Asia	HK	Consumer Discretionary	0.2%
SJM Holdings	HK	Consumer Discretionary	-0.4%
It	HK	Consumer Discretionary	-1.7%
Gajah Tunggal	ID	Consumer Discretionary	19.5%
Bisi International	ID	Consumer Staples	-5.4%
Hotel Leela Venture	IN	Consumer Discretionary	33.7%
Bajaj Hindusthan	IN	Consumer Staples	25.2%
Bombay Dyeing & Mnfg.	IN	Consumer Discretionary	23.3%
Rajesh Exports	IN	Consumer Discretionary	9.2%
Gitanjali Gems	IN	Consumer Discretionary	7.8%
Ruchi Soya Industries	IN	Consumer Staples	5.7%
Tata Global Beverages	IN	Consumer Staples	2.6%
Bata India	IN	Consumer Discretionary	2.5%
Britannia Inds.	IN	Consumer Staples	2.2%
Indian Hotels	IN	Consumer Discretionary	1.8%
Amtek India	IN	Consumer Discretionary	0.8%
Eih	IN	Consumer Discretionary	-0.3%
Mcleod Russel India	IN	Consumer Staples	-1.2%
Bharat Forge	IN	Consumer Discretionary	-3.7%
Balrampur Chini Mills	IN	Consumer Staples	-3.7%
Mrf	IN	Consumer Discretionary	-4.7%
Radico Khaitan	IN	Consumer Staples	-4.8%
Raymond	IN	Consumer Discretionary	-5.2%
Apollo Tyres	IN	Consumer Discretionary	-6.1%
Shree Renuka Sugars	IN	Consumer Staples	-6.3%
Arvind	IN	Consumer Discretionary	-8.6%
Shopper'S Stop	IN	Consumer Discretionary	-8.9%
T V S Motor	IN	Consumer Discretionary	-12.8%
Educomp Solutions	IN	Consumer Discretionary	-13.6%
Amtek Auto	IN	Consumer Discretionary	-32.5%
Alok Industries	IN	Consumer Discretionary	-39.9%
Ql Resources	MY	Consumer Staples	12.4%
Tan Chong Motor Holdings	MY	Consumer Discretionary	3.5%
Tsh Resources	MY	Consumer Staples	3.2%

Stock	Country	Sector	Implied Growth Difference (Latest – Jul'09)
Kim Loong Resources	MY	Consumer Staples	1.9%
Th Plantations	MY	Consumer Staples	1.4%
Hap Seng Pltns.Hdg.	MY	Consumer Staples	1.0%
Ijm Plantations	MY	Consumer Staples	0.7%
Carlsberg Brewery Mal.	MY	Consumer Staples	0.7%
Genting Plantations	MY	Consumer Staples	0.5%
United Malacca	MY	Consumer Staples	0.4%
Berjaya Sports Toto	MY	Consumer Discretionary	-0.1%
Ppb Group	MY	Consumer Staples	-0.3%
Ijm Land	MY	Consumer Discretionary	-1.6%
Parkson Holdings	MY	Consumer Discretionary	-1.7%
Media Prima	MY	Consumer Discretionary	-1.8%
Sarawak Oil Palms	MY	Consumer Staples	-2.4%
Universal Robina	PH	Consumer Staples	10.5%
Alliance Global Gp.	PH	Consumer Staples	2.8%
Golden Agri-Resources	SG	Consumer Staples	0.2%
Jardine Cyc.& Carr.	SG	Consumer Discretionary	-1.7%
Olam International	SG	Consumer Staples	-5.2%
Central Plaza Hotel	TH	Consumer Discretionary	5.1%
Charoen Pokphand Foods	TH	Consumer Staples	4.2%
Thai Vegetable Oil	TH	Consumer Staples	4.1%
Mcot	TH	Consumer Discretionary	3.5%
Cp All	TH	Consumer Staples	2.8%
Bec World	TH	Consumer Discretionary	2.6%
Major Cineplex Group	TH	Consumer Discretionary	1.5%
Khon Kaen Sugar	TH	Consumer Staples	-3.9%

Source: Datastream

■ Statement of Risk

Although there are many uncertainties with equity investing, generally economic and policy surprises pose the most consistent and continuous risks. Economic growth can be volatile, leading to earnings uncertainty. Inflation volatility can likewise lead to interest rate uncertainty. The direction and level of policy rates has a substantial impact upon equity valuations.

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UBS Investment Research: Global Equity Rating Allocations

UBS 12-Month Rating	Rating Category	Coverage[1]	IB Services[2]
Buy	**Buy**	45%	36%
Neutral	**Hold/Neutral**	45%	36%
Sell	**Sell**	11%	19%
UBS Short-Term Rating	**Rating Category**	**Coverage[3]**	**IB Services[4]**
Buy	**Buy**	less than 1%	33%
Sell	**Sell**	less than 1%	0%

1:Percentage of companies under coverage globally within the 12-month rating category.
2:Percentage of companies within the 12-month rating category for which investment banking (IB) services were provided within the past 12 months.
3:Percentage of companies under coverage globally within the Short-Term rating category.
4:Percentage of companies within the Short-Term rating category for which investment banking (IB) services were provided within the past 12 months.

Source: UBS. Rating allocations are as of 31 March 2013.

UBS Investment Research: Global Equity Rating Definitions

UBS 12-Month Rating	Definition
Buy	FSR is > 6% above the MRA.
Neutral	FSR is between -6% and 6% of the MRA.
Sell	FSR is > 6% below the MRA.
UBS Short-Term Rating	**Definition**
Buy	Buy: Stock price expected to rise within three months from the time the rating was assigned because of a specific catalyst or event.
Sell	Sell: Stock price expected to fall within three months from the time the rating was assigned because of a specific catalyst or event.

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Market Return Assumption (MRA) is defined as the one-year local market interest rate plus 5% (a proxy for, and not a forecast of, the equity risk premium).
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Short-Term Ratings reflect the expected near-term (up to three months) performance of the stock and do not reflect any change in the fundamental view or investment case.
Equity Price Targets have an investment horizon of 12 months.

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